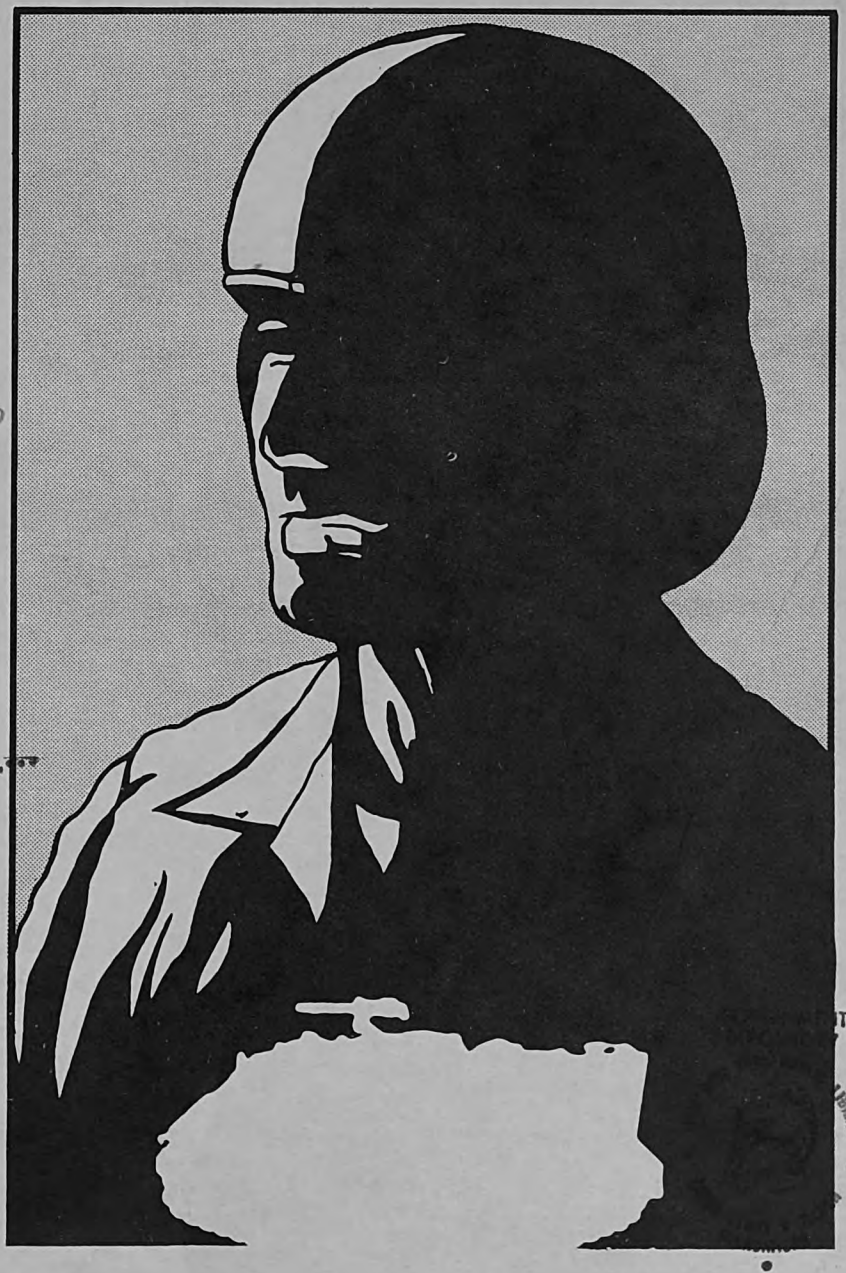
HEADQUARTERS
DEPARTMENT OF THE ARMY

FM 17-19D3

SOLDIER'S MANUAL

CAVALRY SCOUT



MOS 19D

SKILL LEVEL 3

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Field Manual
No. 17-19D3

FM 17-19D3

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 14 September 1979

SOLDIER'S MANUAL
MOS 19D, SKILL LEVEL 3
CAVALRY SCOUT

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REORDER BLANK ..... Reorder Blank-1

To comply with guidance of the Assistant Secretary of Defense (Manpower and Reserve Affairs), this Soldier's Manual has been reviewed for the use of neutral language. Unless otherwise noted, where the third person singular is used in this publication, the word "he" will be understood to stand for both masculine and feminine genders.

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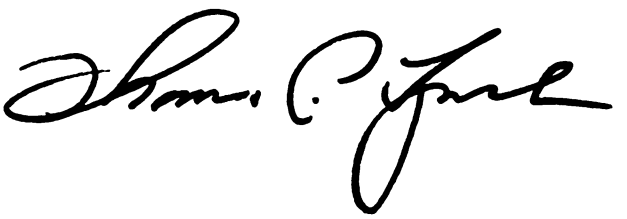
COMMANDER'S ATTENTION

Soldier's Manuals are designed to tell soldiers what tasks they must be proficient in to be MOS qualified. If soldiers follow the road map these manuals provide, they should progress readily to positions of responsibility commensurate with their aptitude and motivation.

Initial distribution of Soldier's Manuals will be made to the unit level, based upon assigned strength in the particular MOS and Skill Level. In the event additional manuals are needed by the unit for MOS study, libraries, or other training needs, requests for publications may be sent directly to the US Army Publications Center, 2800 Eastern Boulevard, Baltimore, MD 21220.

When soldiers are issued Soldier's Manuals by their units, they are responsible for retaining and maintaining them. If they transfer, they must return the manuals to their units.

This Soldier's Manual was prepared by the US Army Armor School.



THOMAS P. LYNCH
Major General, USA
Commandant

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RESERVE COMPONENTS: ARMY NATIONAL GUARD AND ARMY RESERVE

This Soldier's Manual is representative of the critical tasks to be performed by the active Army soldier in your MOS on equipment available in the active Army inventory.

Most tasks in this manual *are applicable to you* without changes. However, some tasks may require modification due to differences of equipment, facilities, and training time available.

Many tasks you have learned are in this manual; however there are other critical tasks that you must learn on your own. Training references/materials are available and can be provided to you through your unit. This is where your initiative comes into play. It is to your advantage to take the initiative NOW. Your performance in your duty position will be based on your ability to perform all the critical tasks for which you are accountable.

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CHAPTER 1

INTRODUCTION

USING YOUR SOLDIER'S MANUAL

This Soldier's Manual contains the tasks and task summaries for skill level 3, MOS 19D. It is the second in a series of four manuals (skill levels 1 and 2 are combined) which together completely describe all the skills that make up MOS 19D. Each manual is directed toward a specific grade as you, the soldier, prepare to advance. Just as a soldier builds on his knowledge, these manuals build on each other.

The list in chapter 2 contains those additional tasks that, together with all your previous skills at skill levels 1 and 2, will be tested on Skill Qualification Test (SQT) skill level 3. Approximately one-quarter to one-third of the skill level 3 test will come from this new list of skills. The remainder of the test will come from the skills you learned from the previous Soldier's Manual. The skills listed are presented in the same manner as those in chapters 2 and 3 of the skill level 1 and 2 manual.

Learn all these tasks and practice them. If you are serving as a cavalry scout, that will be no problem. If you are serving in some other job away from cavalry, request through your chain of command some training time for preparation. You must learn these skills before you can pass the SQT skill level 3 and be promoted to E6.

Post this manual behind FM 17-19D1/2. Use the two manuals together to prepare for the skill level 3 SQT. As you progress in rank, additional manuals will be provided for skill levels 4 and 5 (MOS 19Z). The series, when assembled, will be a comprehensive reference of all the critical tasks applying to your MOS.

JOB SUMMARY

You have now acquired skill level 2. This skill level is associated with the grade of E5 and MOS 19D20.

The job possibilities for you as a 19D30 are a scout section leader or squad leader. You may also serve in a cavalry unit equipped with the TOW weapon system.

The critical tasks that apply to these jobs are contained in chapter 2. You must be proficient in these tasks.

Remember, as you progress to skill level 3, you are still required to maintain proficiency in your skill level 1 and 2 tasks. Furthermore, as a leader, you have a responsibility to train your subordinates in those tasks you have already mastered.

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USAARMS is proponent for task summaries in this Soldier's Manual which begin with the numbers ***171-****, and have as a middle group the numbers 121 thru 140. Preparing agencies for other tasks and their system/subject area codes (the middle number group) are:*

031*-503*	*Chemical Directorate, US Army Ordnance Center and School (USAOC&S), Edgewood Arsenal*
051*-191 thru 265*	*USA Engineer School (USAES)*
061*-266 thru 310*	*USA Field Artillery School (USAFAS)*
071*-311 thru 335*	*USA Infantry School (USAIS)*
081*-821 thru 895*	*Academy of Health Sciences, US Army (AHSUSA)*
113*-571 thru 715*	*USA Signal School (USASIGS)*
121*-001 thru 040*	*USA Institute of Administration (USAIA)*
191*-376 thru 395*	*USA Military Police School (USAMPS)*
301*-336 thru 375*	*USA Intelligence Center and School (USAINTS)*
551*-716 thru 790*	*USA Transportation School (USATSCH)*
###-091	*USA Air Defense School (USAADS)*
###-530	*USA Quartermaster School (USAQMS)*
###-896	*USA Combat Arms Training Board (USACATB)*

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CHAPTER 2

COMMON TASKS FOR CAVALRY SCOUTS

SKILL LEVEL 3

TASK NUMBER	TASK	Page
	LAND NAVIGATION AND MAP READING	
071-329-1019	Use a Map Overlay	2-3
071-331-0820	Analyze Terrain Using the 5 Military Aspects of Terrain	2-14
071-332-5036	Prepare a Strip Map	2-17
171-121-3011	Prepare a Terrain Sketch	2-23
	NUCLEAR, BIOLOGICAL, AND CHEMICAL	
031-503-3002	Initiate Unmasking Procedures	2-25
031-503-3005	Prepare and Submit NBC-1 Reports	2-27
031-503-3009	Monitor Personnel, Supplies, and Equipment for Beta/Gamma Radiation Using AN/PDR-27 Radiac Set	2-31
	SECURITY AND INTELLIGENCE	
171-306-3005	Prepare a Shell/Bomb/Mortar Report	2-34
	COMBAT RECONNAISSANCE	
171-121-2001	Conduct a Mounted/Dismounted Reconnaissance Patrol	2-37
171-140-3002	Conduct a Tactical Inspection	2-56
	DRAGON (Medium Antitank Weapon)	
071-317-3324	Select a Defensive DRAGON Firing Position	2-58

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071-317-3330	Prepare an M47 DRAGON Training Set for Operation	2-62
	TOW (Heavy Antitank Weapon)	
071-326-5580	Ocupy a TOW Firing Position	2-66
	MINE WARFARE	
051-192-3032	Install a Hasty Protective Minefield	2-70
	DEMOLITIONS	
051-193-3506	Create Obstacles Using Demolitions	2-76
	ADMINISTRATION, LEADERSHIP, AND TRAINING	
121-030-2501	Prepare the Rater's Section of an Enlisted Evaluation Report (EER)	2-79
171-132-3001	Supervise Operator/Crew Maintenance	2-87
171-530-3001	Inspect Organizational Historical Records	2-89
171-896-3001	Prepare and Conduct a Performance-oriented Training Session (Individual and Collective)	2-92

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USE A MAP OVERLAY

CONDITIONS

Given a military map and a map overlay containing any of the graphic symbols shown in figure 2.

STANDARDS

Without the use of references:

1. Draw all graphic information on the overlay, to within 100 meters on the map, using grid coordinates or terrain features.

2. State the meaning of each graphic symbol.

PERFORMANCE MEASURES

1. Map overlays consist of the following:

   a. Orientation. A means by which the overlay is positioned on a map.

   b. Plotting of detail. Information pertaining to a specific mission or operation is shown using graphic symbols.

   c. Marginal information. The overlay title, date and time of information, map reference, who prepared the overlay, and any nonstandard graphic symbols used or other additional information needed to use the overlay. It is placed in a corner of the overlay, usually the lower right.

   d. Classification. The security classification is entered at the top and bottom of the overlay. Make certain that you handle overlays as you would documents with similar classification.

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PERFORMANCE MEASURES (cont)

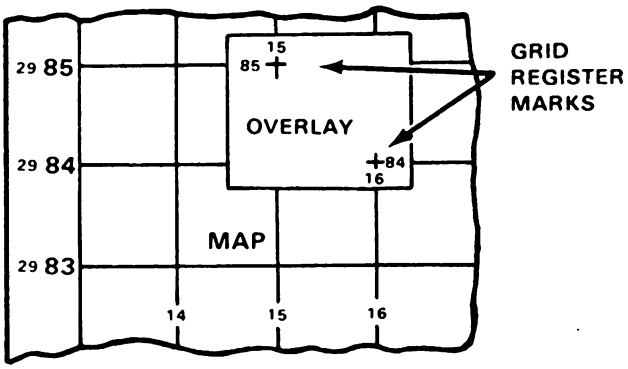

Figure 1. Registering the overlay.

2. To use a map overlay:

   a. Obtain the map sheet(s) listed in the marginal information.

   b. Locate the grid intersections on the map which correspond to the grid register marks located in opposite corners of the overlay.

   c. Place the overlay on the map so that the grid register marks fall exactly on top of the grid intersections (fig 1).

   d. Since the overlay material is semi-transparent, you will be able to see the map through it. Therefore, you can identify map locations (by coordinates or terrain features) to which the graphic information pertains.

   e. Locate the points and areas identified on the ground.

   f. Take action appropriate to the graphic information given.

3. As a minimum, you must be able to recognize the graphics in figure 2 without the aid of any references.

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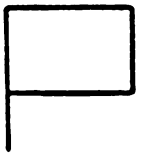
PERFORMANCE MEASURES (cont)

Basic Symbols:

A Unit

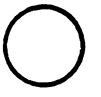


A Headquarters

Unit Trains

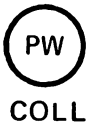
Ammunition Supply Point

An Observation Post



An Administrative or Logistical Installation

A Maintenance Activity



A Prisoner of War Collection Point

A Medical Installation

Figure 2.

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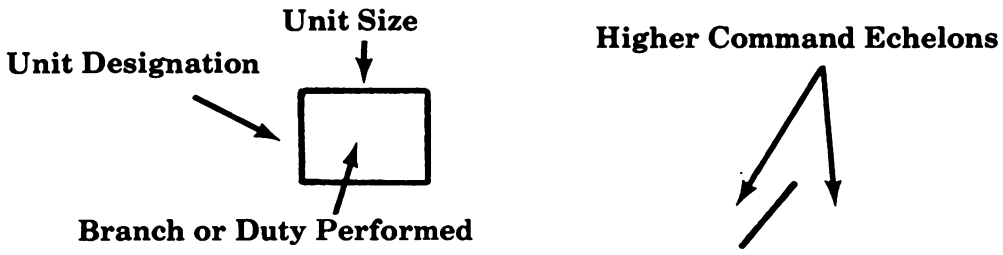
PERFORMANCE MEASURES (cont)

Development of a unit symbol:



Unit Size Symbols:

● Squad	| Company, Battery or Troop	Task Force (Bn Size)
●● Section	Team (Company Size)	||| Regiment or group
●●● Platoon	|| Battalion or Squadron	× Brigade

Figure 2. (cont)

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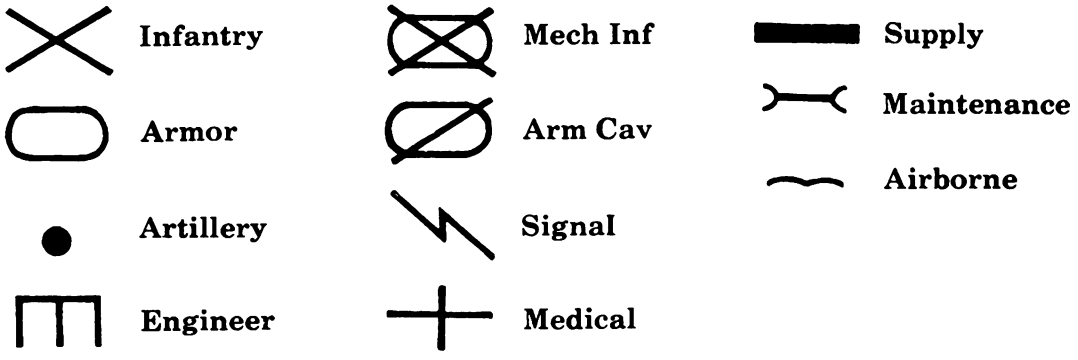
PERFORMANCE MEASURES (cont)

Branch symbols:



Enemy units are depicted in red or as double lines:

Enemy Platoon (Inf)

Proposed or future locations are depicted using broken lines:

Figure 2. (cont)

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PERFORMANCE MEASURES (cont)

Tactical control measures:

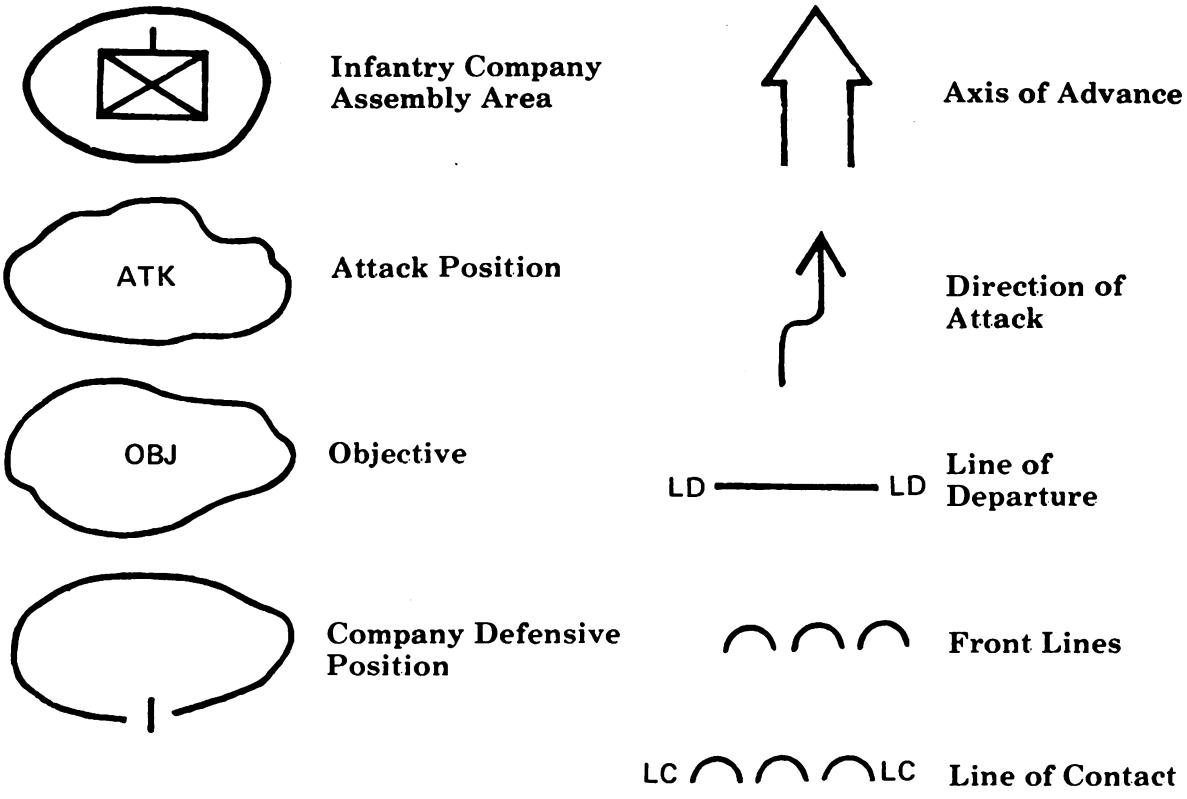

Figure 2. (cont)

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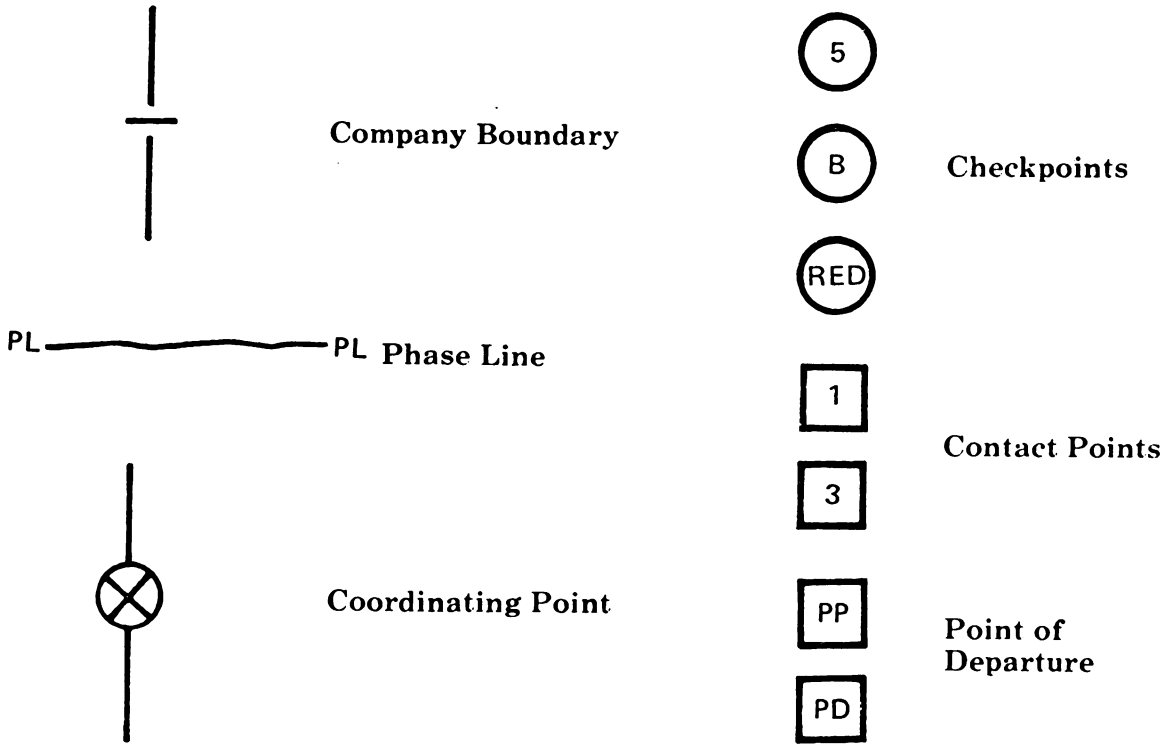
PERFORMANCE MEASURES (cont)



Weapons symbols:

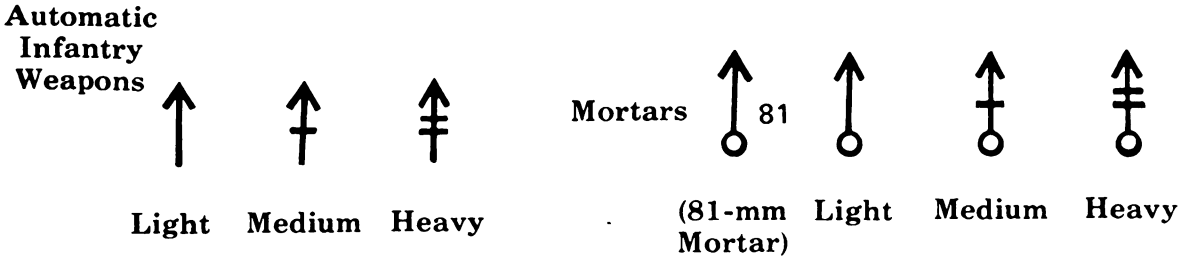


Figure 2. (cont)

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TASK SUMMARY 071-329-1019 (cont)

PERFORMANCE MEASURES (cont)

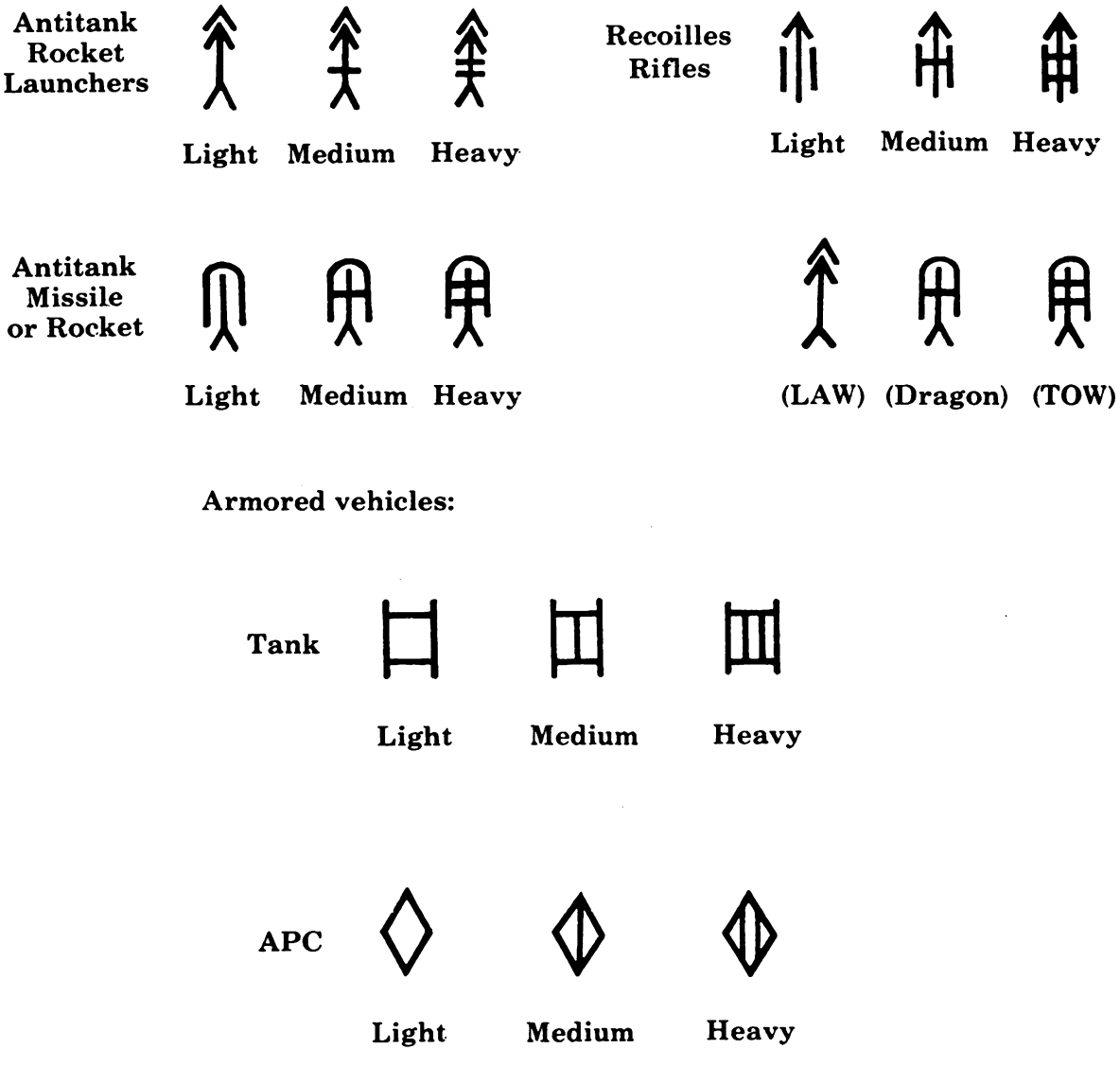

Figure 2. (cont)

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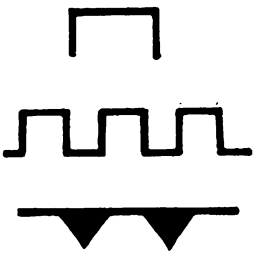
PERFORMANCE MEASURES (cont)

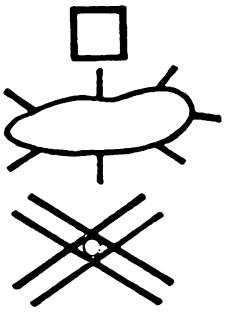
■ Fortifications and obstacles:



Weapon Fighting Position

Trench System

Tank Ditch



Pillbox or Casement

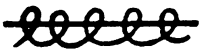
Strongpoint

Completed Roadblock

■ Wire:

Unspecified

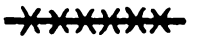
Concertina, Single



Concertina, Multiple

Fence, Single

Fence, Double



Double Apron Fence

Low Wire Fence

High Wire Fence

Tripwire

Figure 2. (cont)

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PERFORMANCE MEASURES (cont)

■ **Mines:**

Unknown

Antipersonnel

Antitank

Antitank, Boobytrapped

Boobytrap

■ **Indirect fire symbols:**

Target (w/number)

Reference Point

Final Protective Fire (FPF)

Figure 2. (cont)

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TASK SUMMARY 071-329-1019 (cont)

REFERENCES

FM 21-26, Map Reading, chap 7, pp 7-1 thru 7-4, para 7-1 thru 7-3.
FM 21-30, Military Symbols, chap 2, pp 2-2 thru 2-4, apps E and F, pp E1 thru F7.

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ANALYZE TERRAIN USING THE 5 MILITARY ASPECTS OF TERRAIN

CONDITIONS

Given any tactical mission which involves a specified route or location on the ground or map.

STANDARDS

Analyze route or location in terms of the military aspects of terrain (observation and fire, concealment and cover, obstacles, key terrain, and avenues of approach) and determine how each affects the mission.

PERFORMANCE MEASURES

Terrain is analyzed in terms of its five military aspects (observation and fire, concealment and cover, obstacles, key terrain, and avenues of approach) to determine the effect of terrain on the general courses of action available to friendly and enemy forces.

1. Observation and Fire.

    a. Observation depends on conditions of terrain which permit a force to locate the enemy either visually or through the use of surveillance devices. The best observation generally is obtained from the highest terrain features in an area. The effects of visibility on observation are analyzed with weather. Visibility and observation are analyzed independently because visibility varies with weather conditions, whereas observation varies with terrain conditions which are relatively permament.

    b. Fire encompasses the influence of the terrain on the effectiveness of direct and indirect fire weapons. The fires of indirect fire weapons are affected primarily by terrain conditions within the target area. Fields of fire for direct fire weapons are primarily affected by terrain conditions between the weapon and target.

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PERFORMANCE MEASURES (cont)

c. You, the section leader/tank commander, must identify those terrain features within and adjacent to the area of operation which afford the friendly or enemy force favorable observation and fire. You consider them in your subsequent analysis of concealment and cover, key terrain, and enemy forces.

2. Concealment and Cover. Concealment is protection from observation; cover is protection from the effects of fire. As a section leader/tank commander, you must determine the concealment and cover available to both friendly and enemy forces.

a. Concealment may be provided by terrain features and vegetation such as woods, underbrush, or cultivated vegetation, or by any other feature which denies observation. Concealment does not necessarily provide cover.

b. Cover may be provided by terrain features or manmade features. Areas that provide cover from direct fire may or may not protect against the effects of indirect fire; however, most terrain features that offer cover also offer concealment.

3. Obstacles.

a. An obstacle is any natural or artificial terrain feature which stops or impedes military movement.

b. Consideration of obstacles is influenced by the mission.

c. An obstacle may be an advantage or disadvantage and must be considered on its own merits, in view of a specific mission. For example, obstacles perpendicular to a direction of attack favor the defender by slowing or canalizing the attacker. Obstacles parallel to the direction of attack may assist in protecting a flank of the attacking force.

4. Key terrain. A key terrain feature is any locality or area whose seizure or control affords a marked advantage to either force. The term "seizure" clearly implies physical occupation of the terrain by a force, whereas the term "control" may or may not include physical occupation. The selection of key terrain varies with the level of command, the type of unit, and the mission of the unit.

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PERFORMANCE MEASURES (cont)

5. Avenues of Approach.

a. An avenue of approach is a route for a force of a particular size to reach an objective or key terrain. To be considered as an avenue of approach, a route must provide enough width for the deployment of the size force for which the avenue of approach is being considered.

b. The analysis of an avenue of approach is based on the following considerations:

(1) Observation and fire. (Favorable observation and fire for the force moving on the avenue of approach.)

(2) Concealment and cover. (Provides favorable conditions of concealment and cover--this consideration is frequently in conflict with the preceding one.)

(3) Obstacles. (Avoid those which are perpendicular to the direction of advance and, whenever practical, takes advantage of those which are parallel to the direction of advance.)

(4) Utilizes key terrain.

(5) Provides adequate maneuver space.

(6) Ease of movement.

c. The analysis of an avenue of approach is based solely on terrain considerations.

REFERENCES

FM 30-5, Combat Intelligence, app B, pp B-1 thru B-5.
TEC 935-071-1027-F, Analyze Weather and Terrain.

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PREPARE A STRIP MAP

CONDITIONS

Given guidance that includes the preparation time; the movement plan; and the route overlay, or the route reconnaissance report, or a map covering the route for movement; and, as a minimum, the start point (SP) and release point (RP).

STANDARDS

Within the time specified, prepare a strip map in accordance with your supervisor's guidance and the performance measures.

PERFORMANCE MEASURES

1. Definition: A strip map is an unscaled drawing of a route(s) of march. It may be prepared either as an overlay or as a schematic of the map itself. It is similar to a route overlay, but it is not drawn to scale.

2. Troop movements frequently encompass distances exceeding standard military map sheets or require multiple map sheets, making their issue impractical. The purpose of the strip map is to graphically portray a route of movement to include the critical points along the route.

3. A strip map may be prepared from a route overlay, a route reconnaissance overlay, or from a map reconnaissance drawn on a standard sheet of paper. This will provide the user with the necessary information to reach his destination.

    a. A strip map that is to have general distribution--that is, to squad leaders, vehicle commanders, drivers, or route guides--normally shows only one route (fig 1).

    b. A strip map used as an appendix/annex can have many routes on it and can include bypasses for each route (figs 2 and 3).

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PERFORMANCE MEASURES (cont)

4. Preparation of a strip map as an annex is normally prepared by battalion or higher units.

   a. Orientation. Place the symbol for grid north on the sketch and label it with an "N" designating the general direction of north. No other orientation or grid references are made.

   b. Plotting Detail.

      (1) Draw the route of movement.

      (2) Plot all critical points on areas along a route where interference with movement may occur or where timing is critical. Include start points, check points, release points, phase lines, bridges, tunnels, road junctions, city/town intersections where passage could be confusing, and halts for messing, refueling, etc.

      (3) Plot the start point (SP) and release point (RP) locations, labeling them with their abbreviation, or number (if appropriate).

      (4) Place the distance between critical points in kilometers or miles (using a measurement that would be applicable, dependent upon the movement).

   c. Heading.

      (1) Title. EXAMPLE: Appendix 1 (strip map) to annex C (route overlay) to movement order 11 (Routes Red, Blue, and Green to Sherwood Forrest).

      (2) References. Map references are normally the same as for the operation order that the strip map is supporting.

5. Strip map as an appendix or annex issued separately (fig 2). A strip map that is an appendix/annex to an order that is to have wider distribution than the order and is to be issued separately, must have added to it a heading, an ending, and classification as does an overlay.

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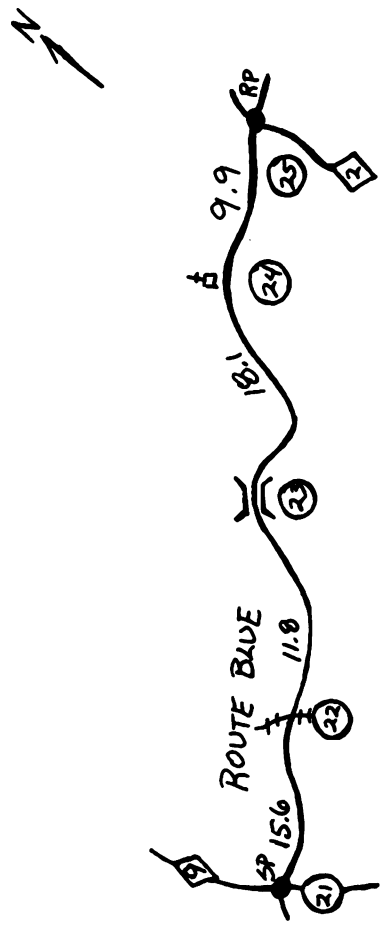
PERFORMANCE MEASURES (cont)

Route Blue to Sherwood Forrest



Note. Distance is in miles.

NOT TO SCALE

Figure 1. Strip map issued to drivers or vehicle commanders.

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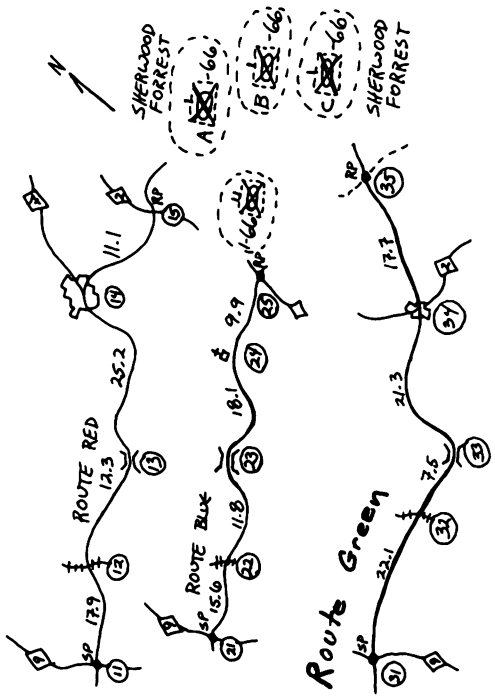
PERFORMANCE MEASURES (cont)

(CLASSIFICATION)



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1-66 Mech Inf
HUNFELD (HB534183) DEUTCHLAOO
261730SEP79

Appendix 1 (Strip Map) to annex C (Route Overlay) to Movement Order II (Routes Red, Blue, and Green).

REFERENCE: Map, Series M-745, HUNFELD, Edition 1976, 1:250,000

Time Zone Used Throughout Order: ALPHA

Note. Distance is in miles

NOT TO SCALE

Acknowledge

Bell
LTC

OFFICIAL:
/s/Brigham
BRIGHAM
S3

(CLASSIFICATION)

Figure 2. Strip map issued separately from the Operation Order.

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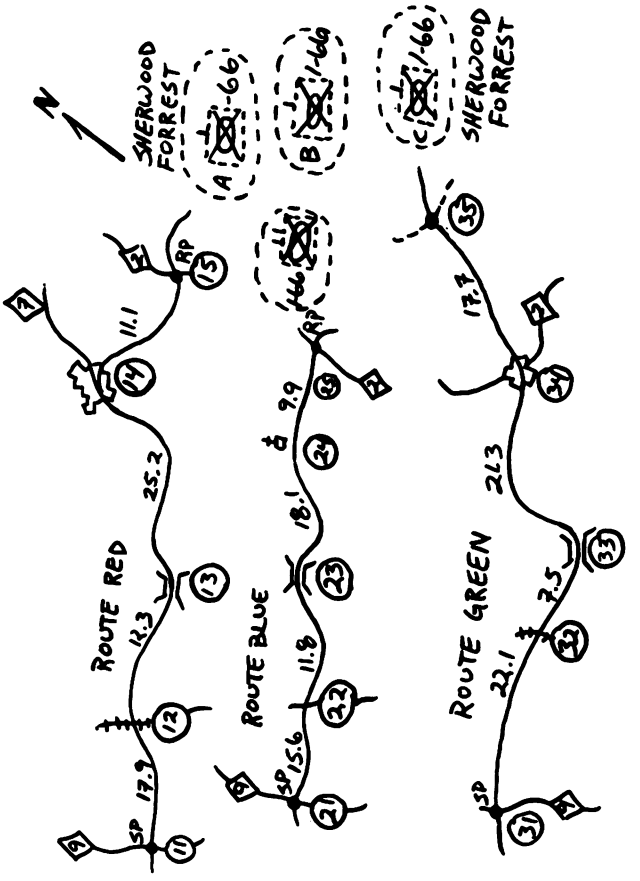
PERFORMANCE MEASURES (cont)

(CLASSIFICATION)



Appendix 1 (Strip Map) to Annex C (Route Overlay) to Movement Order II (Routes Red, Blue, and Green)

REFERENCE: Map, Series M-745, HUNFELD, Edition 1976, 1:250,000.

Note. Distance is in miles,

NOT TO SCALE

(CLASSIFICATION)

Figure 3. Strip map issued with the Operation Order.

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PERFORMANCE MEASURES (cont)

6. Strip maps for general use. Strip maps that are to be distributed to the lowest level will only have the information pertaining to that level (i.e., squad leader, vehicle commander, driver, etc.) (fig 1).

   a. Plotting detail. Detail is plotted the same as for strip maps to be used as an appendix/annex, except no unit symbols or designations are used, and if extracted from a strip map with multiple routes, only that route the user needs is included.

   b. Heading.

      (1) Title. Use a title that alludes to the order but, do not mention the order by name, number, or letter. Use the route name or one that would be applicable for the movement. EXAMPLE: Route Blue to Sherwood Forrest.

      (2) Classification. None; however, personnel should be cautioned as to the sensitivity of the document and should not be issued the strip map until the last possible moment.

REFERENCES

FM 21-18, Foot Marches, chap 1, para 6v, p 6, app c, p 33.
FM 55-30, Army Motor Transport Operations, chap 4, para 4-5 and 4-6, p 4-3 and chap 8, para 8-6, p 8-2.
FM 71-1, Tank and Mechanized Infantry Company Team, app J, p J-1.
FM 71-2, Tank and Mechanized Infantry Battalion Task Force, app H, p H-15.

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PREPARE A TERRAIN SKETCH

CONDITIONS

Given a topographic map (1:50,000) of your location, a platoon, pencil, and paper.

STANDARDS

Within 15 minutes, prepare a hasty terrain sketch with clearly defined contour lines, terrain features, vegetation, natural and man-made objectives, likely enemy avenues of approach, friendly vehicle positions and possible targets.

PERFORMANCE MEASURES

1. Draw contour lines (fig 1) to form major terrain features (mountains, valleys, depressions).
2. Mark contour line elevations in meters.
3. Draw vegetation outlines. Label the vegetation (forests, jungle, orchards).
4. Draw small black squares to represent buildings.
5. Draw lines to represent roads.
6. Draw arrows to plot the likely enemy avenues of approach to your positions.
7. Plot the position of each friendly vehicle.
8. Plot possible targets.
9. Plot suspected and known enemy positions.

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TASK SUMMARY 171-121-3011 (cont)

PERFORMANCE MEASURES (cont)

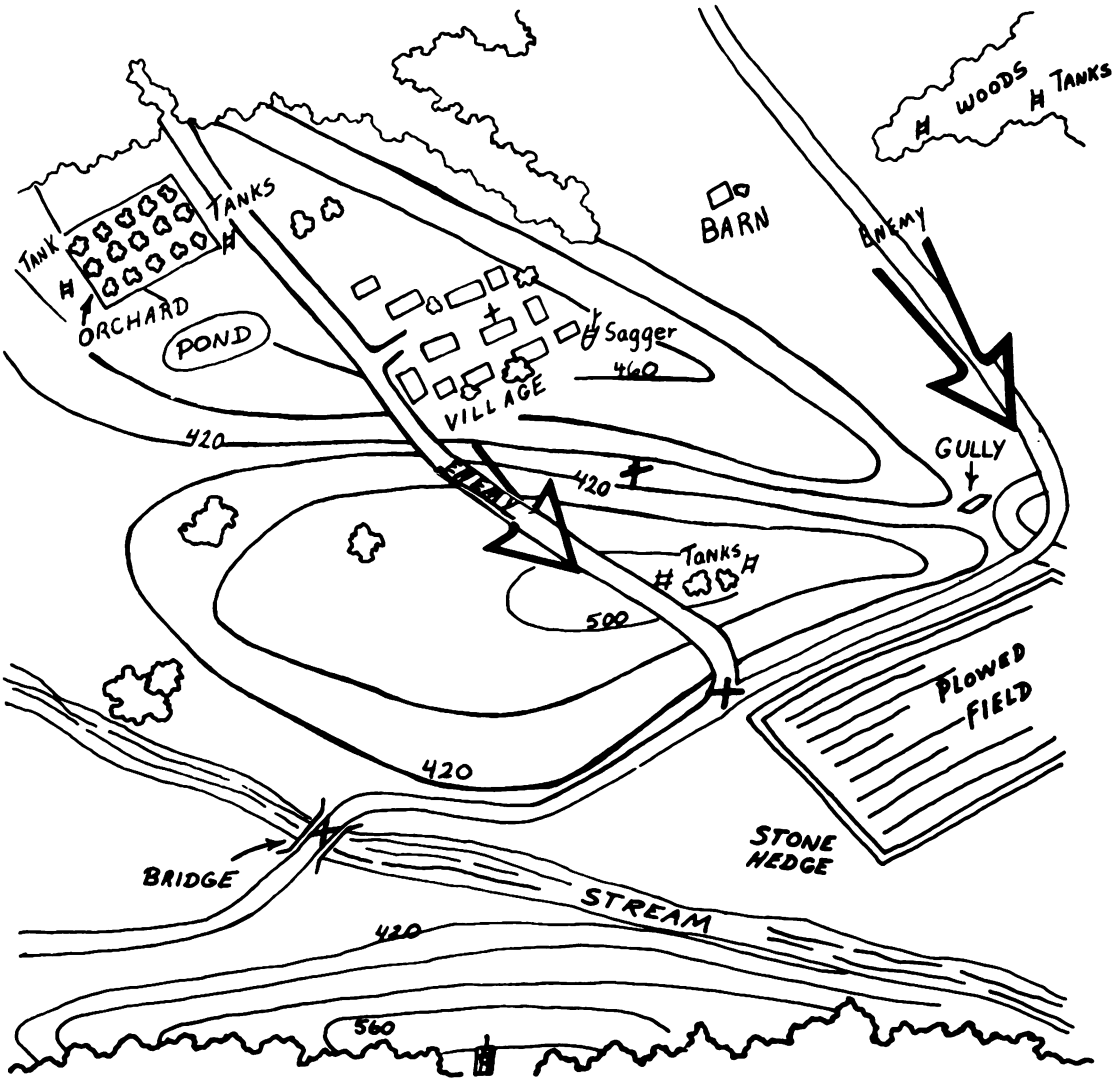

Figure 1. Terrain sketch.

REFERENCES

None.

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INITIATE UNMASKING PROCEDURES

CONDITIONS

Your unit has been exposed to chemical agents. Personnel have been masked for a considerable period of time and:

1. A chemical agent detector kit is available.

2. No chemical agent detector kit is available.

STANDARDS

Personnel unmask safely.

PERFORMANCE MEASURES

1. When a chemical agent detector is available, first determine the absence of chemical agents, then:

   a. Have two or three individuals unmask for 5 minutes and then remask for 10 minutes.

   b. Check individuals for chemical agent symptoms.

   c. If no symptoms appear, you can assume it is safe for all to unmask.

   d. Direct your unit to unmask.

2. When no chemical agent detector is available, have two or three individuals perform the following:

   a. Keeping their eyes open, take a deep breath, hold it, and break the seal of the mask for 15 seconds.

   b. Reseal mask and wait 10 minutes, watch for symptoms, with the men in a shaded area.

   c. Break the seal, take 3 or 4 breaths, and then reseal the masks.

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PERFORMANCE MEASURES (cont)

d. Wait 10 minutes, then check individuals for chemical agent symptoms.

e. Unmask for 5 minutes, remask, and wait for 10 minutes.

f. If no symptoms appear, you can assume it is safe for all to unmask.

g. Direct your unit to unmask.

REFERENCES

FM 21-40, NBC Defense, chap 5, pp 5-3 and 5-4.

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PREPARE AND SUBMIT NBC-1 REPORTS

CONDITIONS

After being subjected to an unexpected NBC attack and taking appropriate protective actions, given a watch, compass, map, pencil, paper, and format for an NBC-1 report (fig 1).

STANDARDS

Within 5 minutes, an accurate NBC-1 report is submitted which includes, as a minimum, lines D, H, and either B and C or F.

PERFORMANCE MEASURES

1. Prepare an initial NBC-1 nuclear report.

   a. At the instant of the "blue-white flash," hit the ground and start counting slowly "one thousand and one, one thousand and two, one thousand and three, ..." and so on until the blast wave has passed.

   b. Record the elapsed time as letter item J in the NBC-1 format.

   c. Check your watch and record the time as letter item D in the NBC-1 format.

   d. Report letter item H as SURFACE if:

      (1) Throwout (earth particles that have fallen back and built up on the edge of the crater) can be seen or,

      (2) A thick, dense stem has developed.

   e. Report letter item H as AIR if the stem is not connected to the mushroom part of the cloud.

      Note. If in doubt, report letter item H as UNKNOWN.

   f. If visibility permits observation of ground zero, use your map to determine the coordinates of ground zero and record as letter item F.

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PERFORMANCE MEASURES (cont)

g. If ground zero cannot be observed, use your compass to measure the azimuth from your location to the center of the stem or mushroom cloud. Record this as letter item C.

h. Record your location as letter item B.

i. Submit the initial NBC-1 nuclear report to your supervisor with a "FLASH" precedence.

2. Prepare a subsequent NBC-1 nuclear report.

a. Measure the angular width of the nuclear burst cloud 5 minutes after the detonation and record as letter item L in the NBC-1 nuclear format (mils or degrees).

Note. The following items, listed in order of preference, are used for measuring this angle:

(1) Aiming circle, M2.

(2) BC scopes, M65 or M43.

(3) Theodolites, T16 or T2.

(4) Hand-held laser rangefinder, AN/GVS-5.

(5) Compass, M2.

b. Measure the vertical angle from ground zero (ground level) to the top or bottom (intersection of the cloud and stem) of the cloud 10 minutes after detonation and record as letter item M in the NBC-1 nuclear format (mils or degrees).

Note. The same items listed in note above may be used.

c. Include previously submitted letter items B, C (or F), D, and H and submit the subsequent NBC-1 nuclear report with an "IMMEDIATE" precedence.

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TASK SUMMARY 031-503-3005 (cont)

PERFORMANCE MEASURES (cont)

LETTER	MEANING	EXAMPLE	
	Precedence.*		
	Date/time (local or ZULU, state which).	_____	_____
	Security classification.	_____	_____
	From.	_____	_____
	To.	_____	_____
	Type of Report.	NBC-1 (Nuclear)	NBC-1 (Chemical)
A.	Strike serial number, if known.		
B.	Position of observer (UTM or place).	B. LB 196400	B. MARVILLE
C.	Direction measured clockwise from grid or magnetic north (state which) of the attack from observer (degrees or mils, state which).	C. Grid 060 degrees	
D.	Date/time of detonation (local or ZULU, state which).	D. 201405 (local)	D. 201405 (local)
E.	Illumination time (seconds).		E. 201412 (local)
F.	UTM or place location of attack (actual or estimated; state which).		F. LB 205305 (est)
G.	Means of delivery, if known.		G. Artillery
H.	Type of burst--air, surface, or unknown (state which)--including height, if known.	H. Surface	H. Airburst nerve
J.	Flash-to-bang time (seconds).	J. 60	
K.	Crater present or absent and diameter (meters), if known.		
L.	Nuclear burst angular cloud width measured at 5 minutes after the detonation (degrees or mils, state which). (Do NOT report if data are obtained more than 5 minutes after the detonation.)	L. 280 mils	
M.	Stabilized cloud-top angle and/or cloud-bottom angle (state which) or cloud-top height and/or cloud-bottom height (state which) measured at H + 10 minutes (mils, degrees, meters, or feet, state which.		

* As appropriate or as per unit SOP.

Figure 1.

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PERFORMANCE MEASURES (cont)

3. Prepare an initial NBC-1 chemical or biological report.

   a. Immediately upon detecting the attack, check the time and record as letter item D.

   b. When the attack ends, again check the time and record as letter item E.

   c. Record type of attack (chemical or biological) as letter item H.

   d. Record your location as letter item B.

   e. Record the location of the attack as letter item F.

   f. If you can identify the means of attack, e.g., artillery, aircraft, bomblets, record as letter item G.

   g. Submit the initial NBC-1 chemical or biological report with a "FLASH" precedence to your supervisor.

4. Prepare a subsequent NBC-1 chemical report.

   a. Obtain type of chemical agent from chemical agent detector kit operator or use the kit yourself (see Task Summary 031-503-3001) and record as letter item H in the NBC-1 format.

   b. If a persistent chemical agent was used in the attack and the contamination area can be defined by detector kit operators, record the grid coordinates that encircle the contaminated area as letter item X in the NBC-1 format.

   c. Include previously submitted letter items B, C (or F), D, and H, and submit the subsequent NBC-1 chemical report with an "IMMEDIATE" precedence.

REFERENCES

FM 21-40, NBC Defense, chap 6, pp 6-10 thru 6-13; app E, sec II, pp E2 thru E-6.

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MONITOR PERSONNEL, SUPPLIES, AND EQUIPMENT FOR BETA/GAMMA RADIATION USING AN/PDR-27 RADIAC SET

CONDITIONS

Given an operational AN/PDR-27 with all necessary components, and the requirement to monitor personnel, supplies or equipment for beta/gamma radiation, or the requirement to determine completeness of radiological decontamination.

STANDARDS

Correctly determine the presence or absence of beta/gamma radiation. For gamma, correctly determine the dose rate to ± 20% of actual source strength.

PERFORMANCE MEASURES

1. Prepare AN/PDR-27 for use.

    a. Remove radiacmeter harness and headset from carrying case.

    b. Attach clips on harness through carrying holes in each end of radiacmeter panel.

    c. Place one arm through opening, slip harness over head, and arrange assembly so radiacmeter is on left side of body and strap is over right shoulder. Adjust shoulder strap for comfortable fit.

    d. If aural indications are desired, put on headset and connect plug to jack on radiacmeter panel.

    e. Turn range switch to BAT COND and observe meter indication. If pointer rests at right of center line in area marked "battery" on movable dial, batteries are in operating condition. If pointer is to left of center line, batteries are exhausted and must be replaced in accordance with TM 11-6665-230-15, sec 2, para 2-4 for the AN/PDR-27R; for the AN/PDR-27J, L, or Q, see TM 11-6665-209-15, sec 2, para 2-2.

    f. Turn range switch to 500.

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PERFORMANCE MEASURES (cont)

2. Monitor personnel.

   a. Have personnel being monitored stand straight with feet 1 foot (30 cm) apart, arms extended sideward with palms up and fingers straight.

   b. Remove the probe and hold the probe window about 1 inch from the individual's hand.

   c. If no radiation is detected or the meter reading is less than five scale divisions, turn the range switch to the next lower scale. If no radiation is detected on the 0.5 mRad scale, continue monitoring using that scale.

   d. Pass the probe over both hands and forearms to the elbows with palms up; then repeat with palms turned down.

   e. Pass the probe over the entire front of the body, starting at the top of the head; check hair, forehead, nose, lips, neckline, torso, knees, and ankles.

   f. Repeat this process from head to ankles over the back of the individual.

   g. Monitor the sole of each foot.

   h. If no radiation is detected, inform the individual he is not contaminated. If radiation is detected, inform your supervisor and have the individual await further instructions.

      Note. If this completes your mission, go to performance measure 5, stop the equipment.

3. Monitor equipment, supplies, and water.

   a. Remove the probe and hold the probe window about 1 inch from the item being monitored.

   b. Hold the probe perpendicular to the surface and move it along the surface with a slow, steady motion.

   c. If no radiation is detected or the meter reading is less than five scale divisions, turn the range switch to the next lower scale. If no radiation is detected on the 0.5 mRad scale, continue monitoring using that scale.

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PERFORMANCE MEASURES (cont)

d. Report the results to your supervisor.

Note. If this completes your mission, go to performance measure 5, stop the equipment.

4. Determine if radiation is beta or gamma or both.

a. Remove the probe.

b. Open the beta window on the end of the probe. (Do not touch the material inside the probe. It is only 0.0005 inch thick and easily damaged.)

c. Hold the end of the probe about 1 inch from the item being monitored and note the reading.

d. Close the beta window.

e. Hold the end of the probe about 1 inch from the item being monitored and note the reading.

f. If you had a reading with the window open, but did not have a reading with the window closed, then beta alone is present. If you had a higher reading with the window open than you did with the window closed, then both beta and gamma are present.

5. Stop the equipment.

a. Turn the range selector switch to OFF.

b. Place the probe into its well.

c. Remove the harness and headset from the radiacmeter.

d. Stow all items in the carrying case.

REFERENCES

FM 3-12 w/C 1 and 2, Operational Aspects of Radiological Defense, chap 2, sec IV, para 3-7 thru 3-9.
TM 11-6665-209-15 w/C 3, 6 and 7, Radiac Set AN/PDR-27J, L, and Q, and sec 3, para 3-3 thru 3-7.
TM 11-6665-230-15 w/C1 and 2, Radiac Set AN/PDR-27R, sec 3, para 3-1 thru 3-6.

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PREPARE A SHELL/BOMB/MORTAR REPORT

CONDITIONS

Given a situation which describes an indirect fire attack, a map of the attacked area, compass, radio, CEOI extract, pencil, paper, and a higher headquarters.

STANDARDS

The report must contain all available information, be prepared in the format outlined in the performance measures, and be submitted to higher headquarters within 5 minutes.

PERFORMANCE MEASURES

1. As soon as you receive indirect fire, button up and continue the mission (see Task Summary 171-140-2006, React to Direct/Indirect Fire as a Vehicle Commander).

2. Prepare the shell/bomb/mortar report in the following format:

LETTER	MEANING
A	UNIT OR ORIGIN. Use the current call sign, address group or code name.
B	POSITION OF OBSERVER. (In code.)
C	DIRECTION (FLASH, SOUND, OR GROOVE) AND ANGLE OF FALL/DESCENT. (Omit for aircraft.) Grid bearing of the flash, sound, or groove of the shell (state which) in mils, unless otherwise specified. The angle of fall or descent may be deterimined by placing a stick/rod in the fuze tunnel and measuring in mils, unless otherwise specified, the angle formed by the stick/rod in relation to the horizontal plane.
D	TIME FROM.
E	TIME TO.

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PERFORMANCE MEASURES (cont)

F AREA BOMBED, SHELLED, OR MORTARED.

1. Location to be sent as:

a. Grid reference (clear reference is to be used).

OR

b. Grid bearing to impact points in mils, unless otherwise specified, and distance in meters from the observer. This information must be encoded if paragraph B is encoded. (When this method is used, maximum accuracy possible is essential.)

2. Dimensions of the area bombed, shelled, or mortared to be given by:

a. The radius (in meters).

OR

b. The length and the width (in meters).

G NUMBER AND NATURE OF GUNS, MORTARS, ROCKET LAUNCHERS, AIRCRAFT, OR OTHER METHODS OF DELIVERY.

H NATURE OF FIRE. (Registration, bombardment, harassing, etc. -- may be omitted for aircraft.)

I NUMBER, TYPE, AND CALIBER (State whether measured or assumed) of shells, rockets (or missiles), bombs, etc.

J TIME OF FLASH TO BANG. (Omit for aircraft.)

K DAMAGE. (Encode if required.)

Note. The shell/bomb/mortar report has additional lines (Lima thru Victor); however, those lines are used only by artillery personnel for counterfire information.

3. Submit the shell/bomb/mortar report to your next higher headquarters using the fastest means available.

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TASK SUMMARY 171-306-3005 (cont)

REFERENCES (cont)

FM 6-121, Field Artillery Target Acquisition, app E, pp E-1 thru E-3.
FM 71-1, Tank and Mechanized Infantry Company Team, app B, p B-2.

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CONDUCT A MOUNTED/DISMOUNTED RECONNAISSANCE PATROL

CONDITIONS

As a leader of a reconnaissance patrol, given a map, scout squad or section with equipment, a maneuver area, and a mission.

STANDARDS

Conduct a mounted/dismounted reconnaissance patrol so that:

1. The patrol order is accurate and reflects the mission assigned the patrol.
2. The patrol avoids detection and contact with the enemy through the proper use of terrain and techniques of movement.
3. The patrol acquires the information required by the mission.
4. The patrol correctly and rapidly reports the information it acquires.

PERFORMANCE MEASURES

1. Analyze the mission.

   Note. In order to make a proper analysis of a mission, it is important that you listen carefully to the operation order, make notes as necessary for you to remember important information, and make sure you understand what is required of you and your subordinates.

   a. Ask questions on any points that are unclear.

   b. If not covered in the operation order, request information on the following areas:

      (1) Movement in friendly areas.

      (2) Departure and re-entry of friendly areas.

      (3) Fire support.

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PERFORMANCE MEASURES (cont)

c. If preplanned indirect-fire targets are available, acquire them and post them to your map.

d. Make a brief map reconnaissance to make sure all aspects of the mission are clear.

2. Plan the elements of the patrol necessary for the preparation of a warning order.

Note. If time and the situation do not permit you to complete a detailed plan, issue the warning order and relate as much information as possible to the members of your patrol.

3. Issue the warning order.

a. Make sure the warning order is given with sufficient time to prepare the squad.

b. Issue the warning order with the following information:

(1) Brief statement of the situation.

(2) Mission of the patrol.

(3) General instructions:

(a) General and special organization.

(b) Uniform and equipment common to all.

(c) Weapons, ammunition, and special equipment.

(d) Chain of command.

(e) Time schedule for the patrol.

(f) Time, place, and uniform for the receipt of the patrol order.

(4) Specific instructions:

(a) To subordinate leaders.

(b) To special purpose teams or key individuals.

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PERFORMANCE MEASURES (cont)

4. Continue to plan.

   a. Use reverse planning to plan the patrol's time (start with the last action for which a time is specified and work back to the present).

   b. Make a reconnaissance of the area if time and the situation permit.

      (1) Make sure the map reconnaissance is accurate and detailed.

      (2) Select primary and alternate routes.

   c. Plan for other phases of the patrol.

      Note. The following list contains many of the phases that could be included. The number and extent you use depends on the mission, your assets and the level of experience within your squad/section. This process can be streamlined through the use of a standard operating procedure with which all the members of the squad/section are familiar.

      (1) Missions in the objective area.

      (2) Other missions.

      (3) Time of departure and return.

      (4) Primary and alternate routes.

      (5) Departure and re-entry of friendly areas.

      (6) Organization for movement.

      (7) Actions at danger areas.

      (8) Action on enemy areas.

      (9) Rallying points, phase lines, and other control measures.

      (10) Actions in the objective area.

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PERFORMANCE MEASURES (cont)

(11) Debriefing.

(12) Other actions.

(13) Rehearsals and inspections.

(14) Rations.

(15) Arms and ammunition.

(16) Uniform and equipment.

(17) Method of handling wounded, dead, and prisoners.

(18) Signals.

(19) Communication with higher headquarters.

(20) CEOI.

(21) Chain of command.

(22) Location of leaders.

5. Issue the patrol order.

a. If a brief warning order can be used, utilize this method. If the scope of the patrol requires greater detail, use a patrol order (see fig 1).

b. Whenever possible, use a visual aid such as a terrain model or sandtable. When these are not available, use your map and overlay, or sketch planned actions in the sand, dirt, or snow.

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PERFORMANCE MEASURES (cont)

SAMPLE PATROL ORDER

1. SITUATION (as it affects the patrol).

   a. Enemy forces: Weather, terrain, identification, location, activity, strength.
   b. Friendly forces: Mission of next higher unit, location and planned actions of units on right and left, fire support available for patrol, missions and routes of other patrols.
   c. Attachments and detachments.

2. MISSION--What the patrol is going to accomplish and the location or area in which it is to be done.

3. EXECUTION

   a. Concept of operation--the overall plan--and missions of elements, teams, and individuals in the objective area.
   b. Other missions, not in the objective area, for elements, teams, and individuals. Included are such tasks as navigation, security during movement, and security at halts.
   c. Coordinating instructions.

      (1) Times of departure and return.
      (2) Primary and alternate routes.
      (3) Departure and re-entry of friendly areas.
      (4) Organization for movement.
      (5) Actions at danger areas.
      (6) Actions on enemy contact.
      (7) Rallying points and actions at rallying points.
      (8) Actions in objective area.
      (9) Debriefing.
      (10) Other actions.
      (11) Rehearsals and inspections.

Figure 1.

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PERFORMANCE MEASURES (cont)

4. ADMINISTRATION AND LOGISTICS

a. Rations.
b. Arms and ammunition.
c. Uniform and equipment (state which members will carry and use).
d. Method of handling wounded and prisoners.

5. COMMAND AND SIGNAL

a. Signal.
(1) Signals to be used within the patrol.
(2) Communication with higher headquarters--radio call signs, primary and alternate frequencies, times to report and special code to be used.
(3) Challenge and password.

b. Command.

(1) Chain of command.
(2) Locations of leaders at various times--during movement, at danger areas, at the objective.

Figure 1 (cont).

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PERFORMANCE MEASURES (cont)

6. Inspect and rehearse critical actions.

   Note. If you are moving as a part of a reconnaissance element when you receive a patrol order, or you do not have the time to conduct a complete inspection and rehearsal, do not delay the mission by stopping to perform these steps. Conduct a quick inspection while you are moving.

7. Conduct the patrol.

   a. Move to the objective using cover and concealment and appropriate techniques of movement to avoid being detected or engaged by the enemy, and return to the SP (if required). Use of terrain and movement techniques will help you move mounted or dismounted on the battlefield without being detected or engaged.

      (1) Use the terrain. Cavalry units must make maximum use of natural cover and concealment in order to survive and accomplish their missions. Cover is protection from fire; concealment is protection from enemy observation. Cover should be used whenever possible. If there is no cover, the concealment offered by trees, shadows, brush, and houses should be used. Camouflage, blended with natural cover and concealment is also an active measure.

         (a) Conspicuous landmarks. Conspicuous landmarks should be avoided, because they attract enemy attention. His artillery and antitank weapons will probably have been registered on them.

         (b) Movement from cover, concealment, or defile. Lead vehicles of a unit or team emerging from a ravine, woods, or other defile should be overwatched by other vehicles, halted in concealed and/or covered positions and ready to provide suppressive fire.

         (c) Dusty terrain. Dusty terrain gives away the movement of cavalry units. Dust can be minimized by slow movement and dispersion. Vehicle tracking should be avoided.

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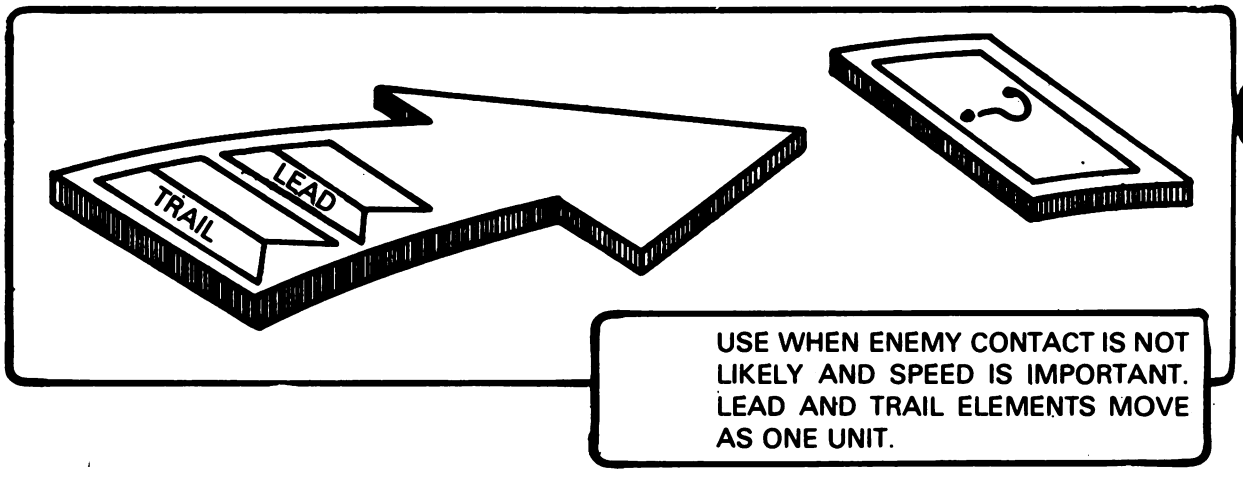
PERFORMANCE MEASURES (cont)

(2) Use the appropriate movement technique.

(a) Traveling. In this technique, the lead and trail elements of a unit move together as a unit. It is the fastest but least secure movement technique, and is used when speed is important and enemy contact is not likely. Movement is continuous, and interval and dispersion are maintained between vehicles as terrain and administrative restrictions permit.



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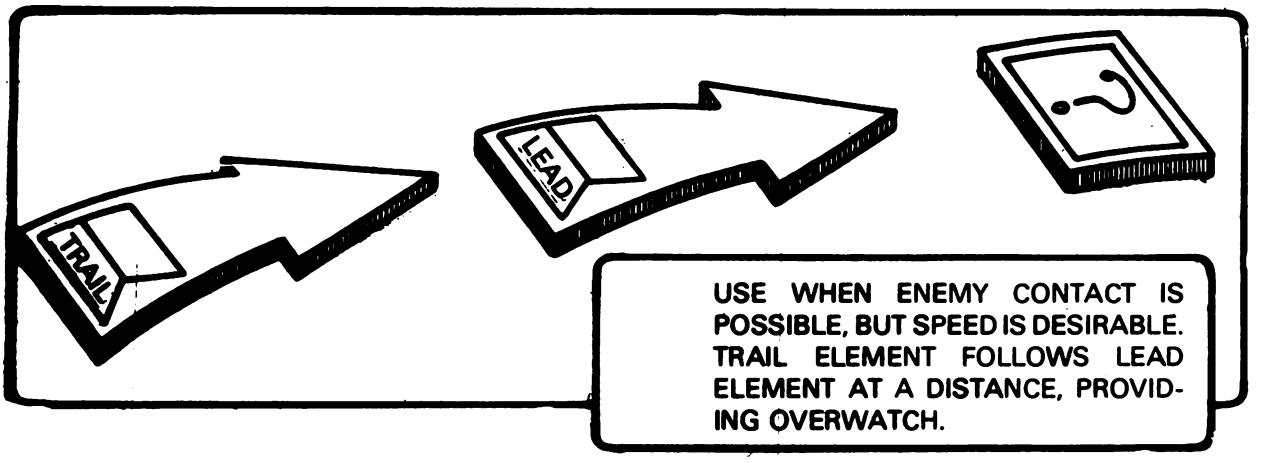
PERFORMANCE MEASURES (cont)

(b) Traveling overwatch. In this technique, the lead and trail elements of a unit again move together, but distance separates the lead and trail elements to improve security. Traveling overwatch is used when contact is possible, but speed is desirable. The lead element moves continually along the most covered and concealed routes for protection from possible enemy observation and direct fire. The trail element moves at variable speeds, continuously overwatching. The trail element must maintain visual contact with the lead element, staying close enough to provide suppressive fire and to maneuver for support, yet far enough to the rear that enemy direct fire engagement of the lead element does not prevent its delivery of suppressive fires or interfere with its maneuverability.


TRAIL
LEAD
USE WHEN ENEMY CONTACT IS POSSIBLE, BUT SPEED IS DESIRABLE. TRAIL ELEMENT FOLLOWS LEAD ELEMENT AT A DISTANCE, PROVIDING OVERWATCH.

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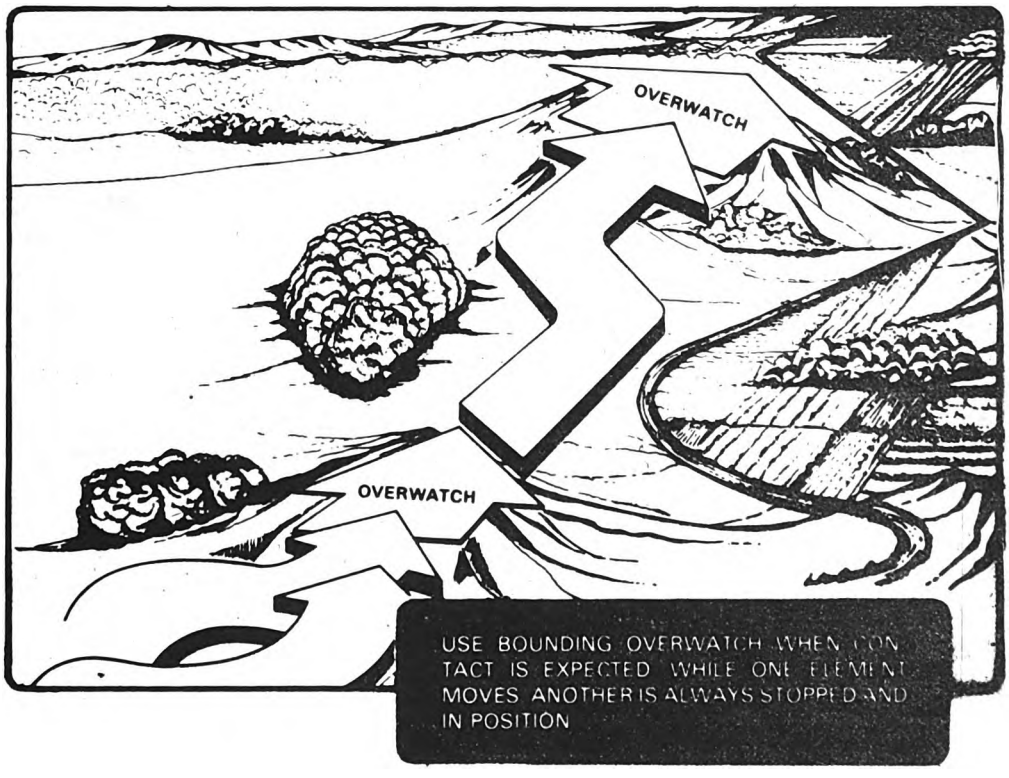
PERFORMANCE MEASURES (cont)

(c) Bounding overwatch. The unit moves by bounds in this technique, with a trailing element always in a position to overwatch the advance of the leading element. It is the slowest, but most secure movement technique, providing the capability for immediate, direct suppressive fire on an enemy force that engages the bounding element with direct fire. This technique is used when enemy contact is expected. In bounding overwatch, the lead element of the unit advances to a point (first move) where it can support the advance of the rear element. On signal, the rear element moves rapidly forward to a position abreast of the leading element (second move) and halts to overwatch the next advance of the lead element (third move). Maximum use is made of folds of the earth and concealment to mask movement from likely enemy positions.


OVERWATCH
OVERWATCH
USE BOUNDING OVERWATCH WHEN CONTACT IS EXPECTED WHILE ONE ELEMENT MOVES ANOTHER IS ALWAYS STOPPED AND IN POSITION

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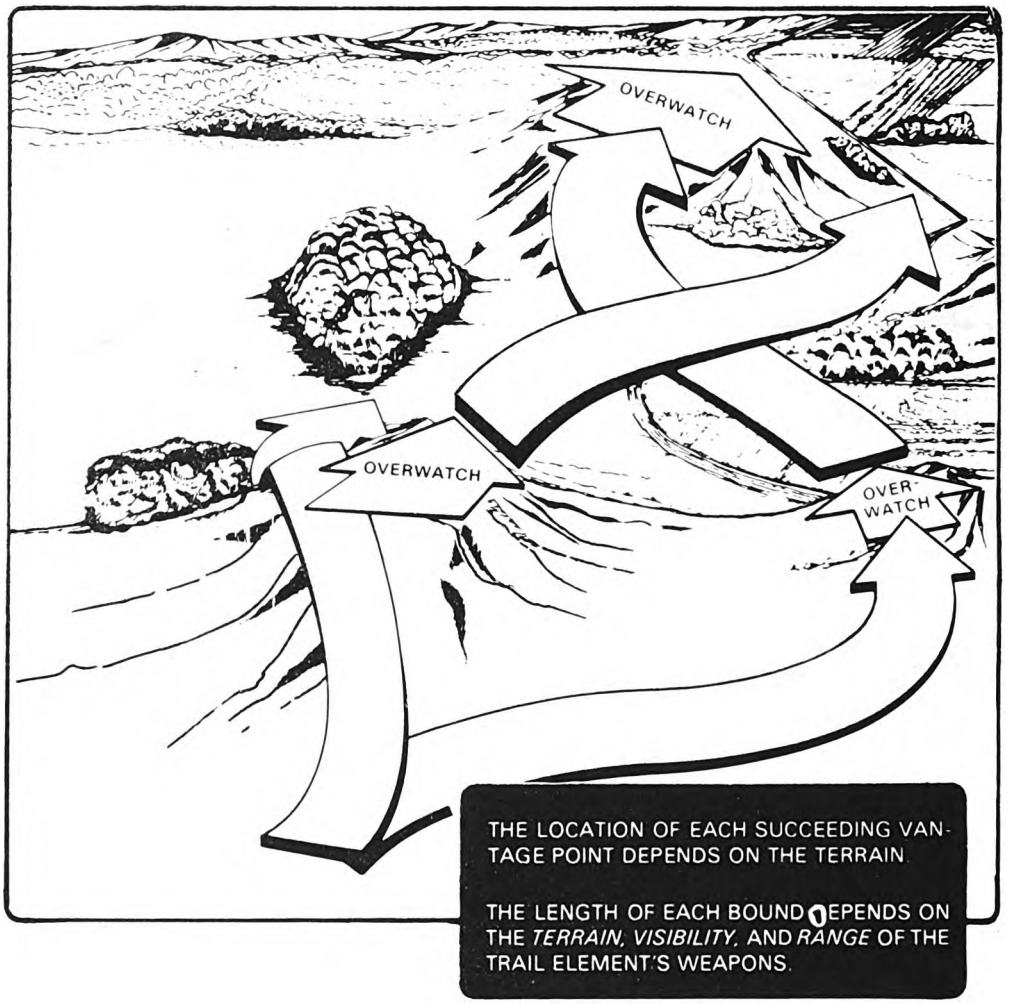
PERFORMANCE MEASURES (cont)

Variation. A variation of bounding overwatch may be used. The lead element moves to the next vantage point (first move), overwatched by the trail element. After the lead element has taken a position, the trail element advances past the lead element to a new vantage point (second move). The initial lead element then advances past the initial trail element to a new position (third move). Movement is continued until contact is made. Within a team, the light armor will not normally bound past the scouts.


OVERWATCH
OVERWATCH
OVER-
WATCH
THE LOCATION OF EACH SUCCEEDING VANTAGE POINT DEPENDS ON THE TERRAIN.
THE LENGTH OF EACH BOUND DEPENDS ON THE *TERRAIN, VISIBILITY,* AND *RANGE* OF THE TRAIL ELEMENT'S WEAPONS.

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PERFORMANCE MEASURES (cont)

THE LEADER OF THE OVERWATCH ELEMENT MUST KNOW:

The direction of the Threat elements.
The location of his overwatch position.
The route and destination of the bounding element.
The location of his leader.
What he can expect to do next.
How he will receive his orders.

THE LEADER OF THE BOUNDING ELEMENT MUST KNOW:

The direction of the Threat elements.
Where he is to move and by which route.
Which movement technique to use.
The location of his leader.
What he can expect to do next.
How he will receive his orders.

Overwatch position. The overwatch position is a key to the bounding overwatch technique, offering the advantages usually associated with the defense, including:

Good observation and fields of fire.
Protection offered by covered and concealed positions.
Immediate and controlled reaction to any threat.
Stationary weapons platform.

Overwatch element leader. The leader of the overwatch element moves his vehicles over covered and concealed routes to hulldown positions and:

Checks the overall security of the position.
Assigns areas of responsibility for observation and fire.
Reports occupation of the position.
Searches for and engages known or likely targets that could endanger the moving element.
Selects route(s) to his next position.

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PERFORMANCE MEASURES (cont)

(3) Night movement. Movement techniques at night, or during periods of poor visibility, are the same for those used during periods of good visibility, but it is harder to navigate and maintain control. Movement under conditions of poor visibility is facilitated by detailed coordination, careful selection of routes, and the use of night vision equipment and battlefield illumination. When illuminating the battlefield, the locations of friendly units must not be illuminated or silhouetted. Maximum use should be made of passive devices, and the use of active devices must be controlled to maintain surprise and hide friendly locations. Movement should be keyed to easily recognizable terrain features, such as roads, fences, tree and pole lines, edges of woods, and streams. Luminous markers should be placed on the rear of vehicles and personnel.

(4) Reconnaissance at night during other periods of reduced visibility.

(a) As a general rule, routes can be reconnoitered at night as in the day, although not as quickly. In the case of zone reconnaissance, zones should be narrowed since command control can be more difficult at night. When it is necessary to perform area reconnaissance at night or during other periods of reduced visibility, more time should be allowed to accomplish the mission.

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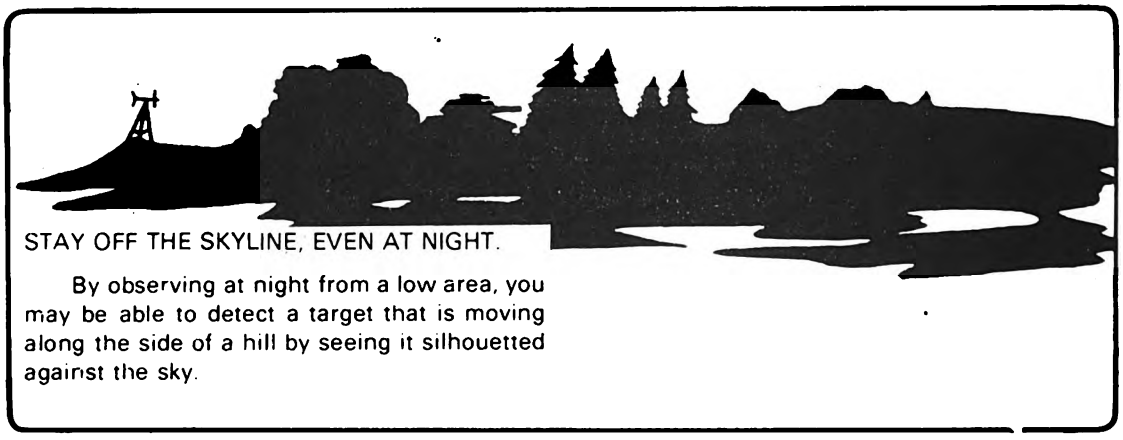
PERFORMANCE MEASURES (cont)

(b) Illumination, passive night vision devices, surveillance radars, and other STANO devices will, to a large degree, offset the problems of darkness (see FM 31-1 and FM 31-100). Since the enemy has a comparable capability and places great emphasis on operations during periods of limited visibility, moving cavalry must use the terrain at night as it does during daylight hours.



STAY OFF THE SKYLINE, EVEN AT NIGHT.

By observing at night from a low area, you may be able to detect a target that is moving along the side of a hill by seeing it silhouetted against the sky.

(c) When illumination is used, it is placed behind the enemy to silhouette him. Cavalry does not locate near burning vehicles or houses.

(d) When bad weather or heavy fog sets in, primary reliance must be placed on ground elements. These periods can be used to rest flight crews and for a surge in the aircraft maintenance effort.

(e) At night or during other periods of reduced visibility, ground cavalry depends on dismounted scouting and patrolling to prevent unnecessary vehicle losses. The location of moving vehicles is particularly easy to pinpoint by sound at night and in fog.

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PERFORMANCE MEASURES (cont)

(f) Reconnaissance during periods of reduced visibility requires significantly higher levels of individual and unit proficiency. Since skill rapidly deteriorates without frequent practice, monthly operations are required. About half of all reconnaissance training shuld be at night. During combat, a completely committed cavalry unit may start losing efficiency after about 36 hours of continuous operation.

b. Enter and move through danger areas (areas that offer no cover and concealment or restrict mobility).

Note. A danger area can be, but is not limited to, any of the following:

Road or road junction.
Stream crossing or river crossing.
Bridge.
Defile.
Open area.
Town or built-up areas.
Depressions.
Heavily vegetated areas.
Man-made obstacles, such as minefields.

When approaching a possible danger area:

(1) Assume a covered and concealed position that affords you overwatch of the area.

(2) Report the danger area.

(a) If you are told to bypass the area:

1. Send an element to locate a bypass and reconnoiter the flanks of that area. Make sure the overwatch element can maintain contact with that element as much as possible.
2. Have the reconnoiter element cross the bypass and establish an overwatch on the other side.

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PERFORMANCE MEASURES (cont)

3. Using a covered and concealed route, move quickly through the bypass and move into an overwatch position on the other side.
4. Report the successful bypass of the danger area, consolidate your patrol, and continue the patrol.

(b) If you are told to reconnoiter the danger area:

1. Reconnoiter the near side and flanks of the danger area, keeping an overwatch element in position at all times.
2. Locate a bypass or ford and send an element over the bypass to the other side of the danger area to establish an overwatch position.
3. Keeping an overwatch of the danger area, reconnoiter the danger area and perform any classifications for reports that may be necessary.
4. Move either through or around the danger area and report your findings rapidly.
5. Consolidate your elements and continue the patrol.

Note. If you have indirect-fire support, be prepared to use it to mask your movement or cover a withdrawal from a danger area by either suppressing suspected enemy positions or by putting smoke to your front or exposed flank.

c. Collect and report all information accurately and rapidly.

(1) Collect the information that was required by the mission. If there is other information that you acquire, do not discard it. It should be reported with the mission related information.

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PERFORMANCE MEASURES (cont)

(2) Report the information as rapidly and accurately as possible (see Task Summary 071-331-0803, Collect/Report Information--SALUTE (Spot Report). For the correct method of preparing and submitting spot reports). If your unit SOP contains methods for reporting specific information (for example, bridge reports and NBC reports), use these methods in the conduct of your patrol.

(3) The following are examples of some of the duties the patrol leader may be required to perform during reconnaissance missions.

(a) Area Reconnaissance. Area reconnaissance is conducted to obtain information concerning a specified area, such as a town, ridge line, woods, or other feature that may be critical to operations. The patrol leader must:

1. Have his patrol thoroughly reconnoitter all adjacent controlling terrain to a specific area.

2. Establish and use control measures for movement to and through the area to be reconnoitered.

3. Send spot reports concerning routes, bridges, bypasses, fords, towns, obstacles, trafficability, and the enemy to higher headquarters as the situation develops.

(b) Route Reconnaissance. This mission is assigned to obtain detailed information of a specified route and all adjacent terrain from which the enemy could influence movement along that route. The patrol leader must make sure:

1. Adjacent terrain dominating the route, woods, towns, and lateral routes are reconnoitered.

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PERFORMANCE MEASURES (cont)

2. The route is reconnoitered and classified (see Task Summary 051-196-2501, Classify a Route and Prepare an Overlay, for the correct method of classifying a route) with respect to the following factors:

   a. Class of bridges.

   b. Location of fords and bypasses.

   c. Clearance of overhead crossovers.

   d. Width, slope, and composition of the roadway.

   e. Depth and width of streams. If vehicles have to swim a stream or river, velocity of the stream or river must be determined.

3. Report the information and classifications as soon as possible (see Task Summary 071-331-0803, Collect/Report Information--SALUTE (Spot Report), for the proper method of reporting).

(c) Zone Reconnaissance. This is a detailed reconnaissance of all natural and man-made features within specified boundaries. It is more thorough and time consuming than other types of reconnaissance. The purpose may be to locate enemy and/or suitable routes of advance for the main body. The patrol leader must:

1. Establish and use control measures to make sure each key terrain feature or man-made feature is reconnoitered. These can be phase lines or checkpoints.

2. Make sure trails, routes, woods, features, and buildings are reconnoitered for enemy presence.

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PERFORMANCE MEASURES (cont)

3. Send spot reports concerning routes, bridges, bypasses, fords, towns, obstacles, cross-country trafficability, and the enemy to the higher headquarters as soon as possible.

4. Not bypass enemy forces without permission form higher headquarters.

REFERENCES

FM 17-95, Cavalry, chap 3, 4, and 5.
FM 21-75,
FM 71-1, The Tank and Mechanized Infantry Company Team, pp 6-2 thru 6-5.

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CONDUCT A TACTICAL INSPECTION

CONDITIONS

Given a fully manned, equipped, and operational combat vehicle in a tactical situation, and a mission.

STANDARDS

1. You must detect all visible breaches of personal hygiene, dirty, and unserviceable weapons, unserviceable clothing, unserviceable TA 50-901, empty canteens, dirty or unserviceable protective masks and accessories.

2. You must detect all low fluid levels in the vehicle, loose track, empty fuel tanks, dirty, faulty, or unserviceable communications equipment, and unserviceable optics.

3. You must detect all improper camouflage, wilted vegetation, personnel, equipment, or vehicle that do not blend into the surrounding terrain, inadequate overhead camouflage, exposed shiny surfaces, and improper positioning of the vehicle.

4. You must detect all unburied food and human waste.

PERFORMANCE MEASURES

1. Inspect personnel and their equipment for:

   a. Personal hygiene of the individual soldier.
   b. Serviceability of clothing and TA 50-901 (for example, torn clothing, heels missing on boots, torn or broken web gear).
   c. Inspect individual weapons and communications equipment for cleanliness and serviceability.
   d. Check for full canteens.
   e. Inspect protective mask for serviceability and completeness (see Task Summary 031-503-1001, Perform Operator's Maintenance on an M17 Protective Mask).

2. Inspect vehicle and BII.

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PERFORMANCE MEASURES (cont)

a. Check to see that before-operation maintenance has been performed on the vehicle.
b. Check fuel tanks to make sure they are full.
c. Check communications equipment to make sure it is serviceable, complete, and that it works.
d. Check all optics for serviceability.

3. Inspect camouflage of vehicle, positions, and personnel (if required).

a. Make sure natural camouflage is not wilted.
b. Make sure vehicle, firing positions, and personnel blend into the surrounding terrain.
c. Make sure no shiny surfaces can be seen.
d. Make sure overhead camouflage is adequate to protect you from aerial reconnaissance.
e. Make sure all trash has been disposed of and cannot give away your position.

4. Inspect your assigned sector to make sure:

a. Human waste is disposed of in a cat hole or slit trench.
b. Food waste is buried.
c. Area is policed.

REFERENCES

FM 21-10, Field Hygiene and Sanitation, chaps 3, 4, 5, and 6.
FM 21-15, Care and Use of Individual Clothing and Equipment, chaps 2 thru 6.
FM 71-1, Tank and Mechanized Infantry Company Team.

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SELECT A DEFENSIVE DRAGON FIRING POSITION

CONDITIONS

Given a standard 1:50,000 military map, a DRAGON weapon system, a DRAGON gunner, in a tactical situation.

STANDARDS

The defensive position selected should meet the following requirements:

1. Has natural cover and concealment.
2. Has clear field of fire.
3. Allows flank and/or rear shots.
4. Mutually supports other anti-armor weapons.

PERFORMANCE MEASURES

1. The principal factors to consider when selecting a position for the DRAGON are twofold:

   a. Gunner's protection.

   b. Employment to take advantage of the capabilities of the DRAGON.

      Note. It may be necessary to trade off one of these factors for the sake of the other.

2. Use natural cover and concealment. Use the terrain to your advantage for cover from the enemy fire and concealment from his ground and aerial observation. In using natural vegetation for concealment, there are certain precautions to observe (fig 1).

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PERFORMANCE MEASURES (cont)

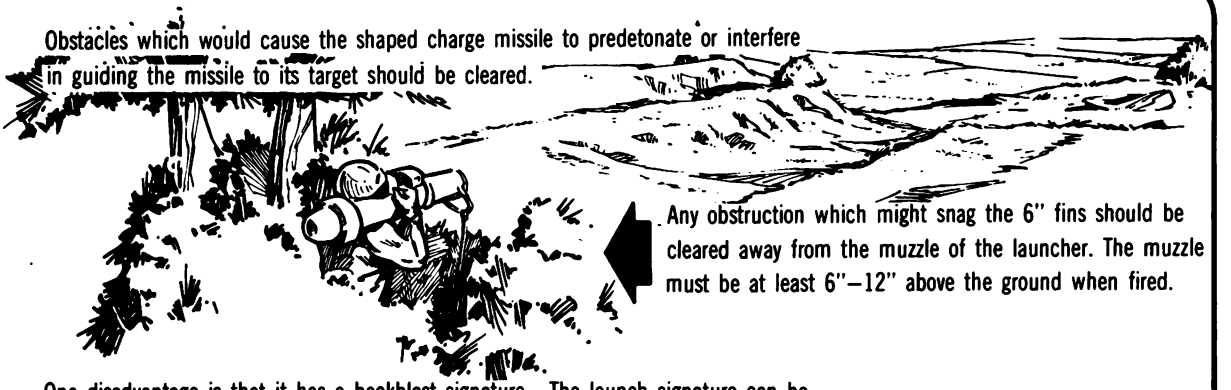
Obstacles which would cause the shaped charge missile to predetonate or interfere in guiding the missile to its target should be cleared.
Any obstruction which might snag the 6" fins should be cleared away from the muzzle of the launcher. The muzzle must be at least 6"–12" above the ground when fired.
One disadvantage is that it has a backblast signature. The launch signature can be reduced by clearing the backblast area of debris, trimming vegetation, wetting down dusty areas, or covering the ground with a canvas or tarpaulin.

Figure 1.

3. Engage the enemy with flank or rear shots. It is more difficult for the enemy to retrace the flight path of a round to its launch site and reorient his weapons on the firing position when the round comes from a direction other than the front (fig 2).

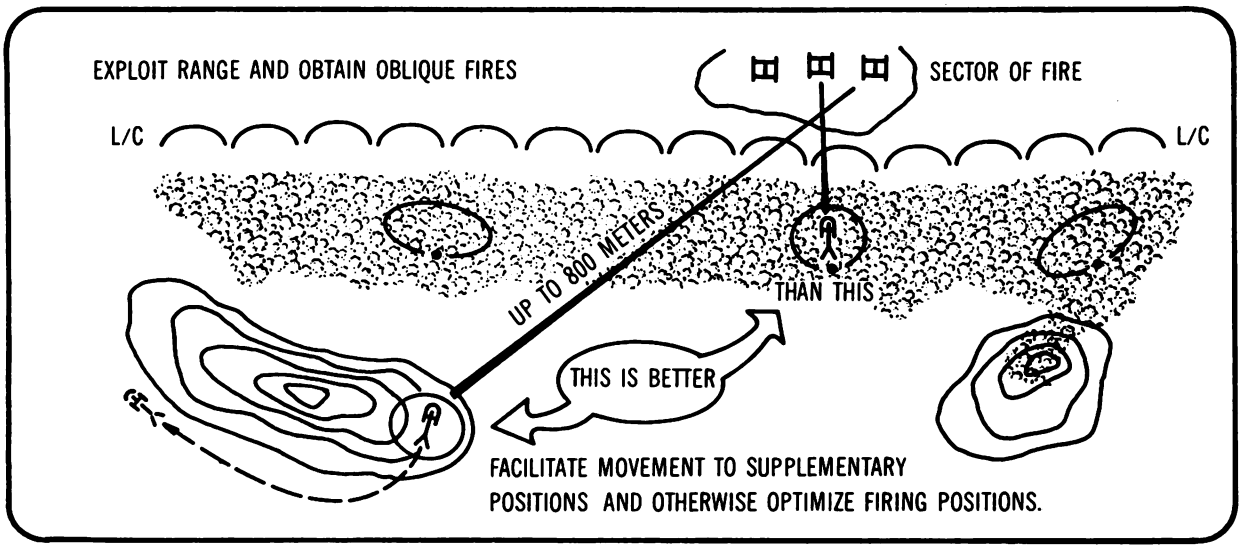

Figure 2.

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PERFORMANCE MEASURES (cont)

4. Mutual support provides a degree of protection for the DRAGON gunner by insuring complete continuous coverage of enemy armor vehicles. It consists of two parts:

   a. Employ your DRAGONS in such a manner that their fires interlock with and support other DRAGON and/or TOWs/tanks. Make sure sectors of fire overlap and, where possible, there is coverage of the sector by more than one anti-armor weapon.

   b. Make every effort to position your DRAGONS so that they can engage enemy armored vehicles assaulting another DRAGON and/or TOW/tank position.

5. Security for the gunner must be provided if the DRAGON is employed away from the squad/platoon. Such security can be provided by forming:

   a. A DRAGON team which consists of a gunner, with a tracker and one round, and one or more riflemen to carry additional rounds and to provide a measure of local security.

   b. An armor-killer team which is formed when a DRAGON team is given additional security, personnel, and a leader, then given an independent mission; e.g., an antiarmor ambush or filling in the gaps during reduced visibility. Normally, this team is of fire team or larger size. This provides for sufficient personnel to carry the tracker and extra rounds, to provide supporting fire, and local security, and to maintain communication and control the team.

6. One of the advantages of the DRAGON is its accuracy against stationary targets out to 1,000 meters. Select firing positions to exploit this advantage; engage the enemy at the maximum range possible. It makes it more difficult for the enemy to detect and engage the DRAGON position. It may also force the enemy to deploy earlier than he had intended. However, because of tracking difficulties, the DRAGON's best engagement range against moving targets is between 200 and 800 meters.

7. Prepare alternate and supplementary positions using the same principals as the primary position discussed in this task summary.

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TASK SUMMARY 071-317-3324 (cont)

REFERENCES

TC 7-24, Antiarmor Tactics and Techniques for Mechanized Infantry, app C, pp C1 thru C37.

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PREPARE AN M47 DRAGON TRAINING SET FOR OPERATION

CONDITIONS

Given an M47 Dragon training set and a common flat tip screwdriver.

STANDARDS

Assemble the M47 Dragon training system in accordance with the performance measures within 15 minutes.

PERFORMANCE MEASURES

1. Prepare the monitor set for operation.

   a. Make sure the internal and external power switches and recorder switch are in the OFF position.

   b. Make sure the tracker power switch is in the AUTO position before making the necessary cable connection.

      Note. The meter indicator should be within the green band.

   c. Place the selector switch in the +VOLTS position (meter indicator should be within the green band).

   d. Place the selector switch in the -VOLTS position (meter indicator should be within the green band).

      Note. If the meter indicator is NOT within the green band, the battery needs recharging.

   e. Place the selector switch in the OFF position.

2. Connect the monitoring set. Interconnect cable W2P1 to the monitoring set jack J1A1, and the cable W2P2 to the launch effects trainer (LET) electrical connector (fig 1).

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PERFORMANCE MEASURES (cont)

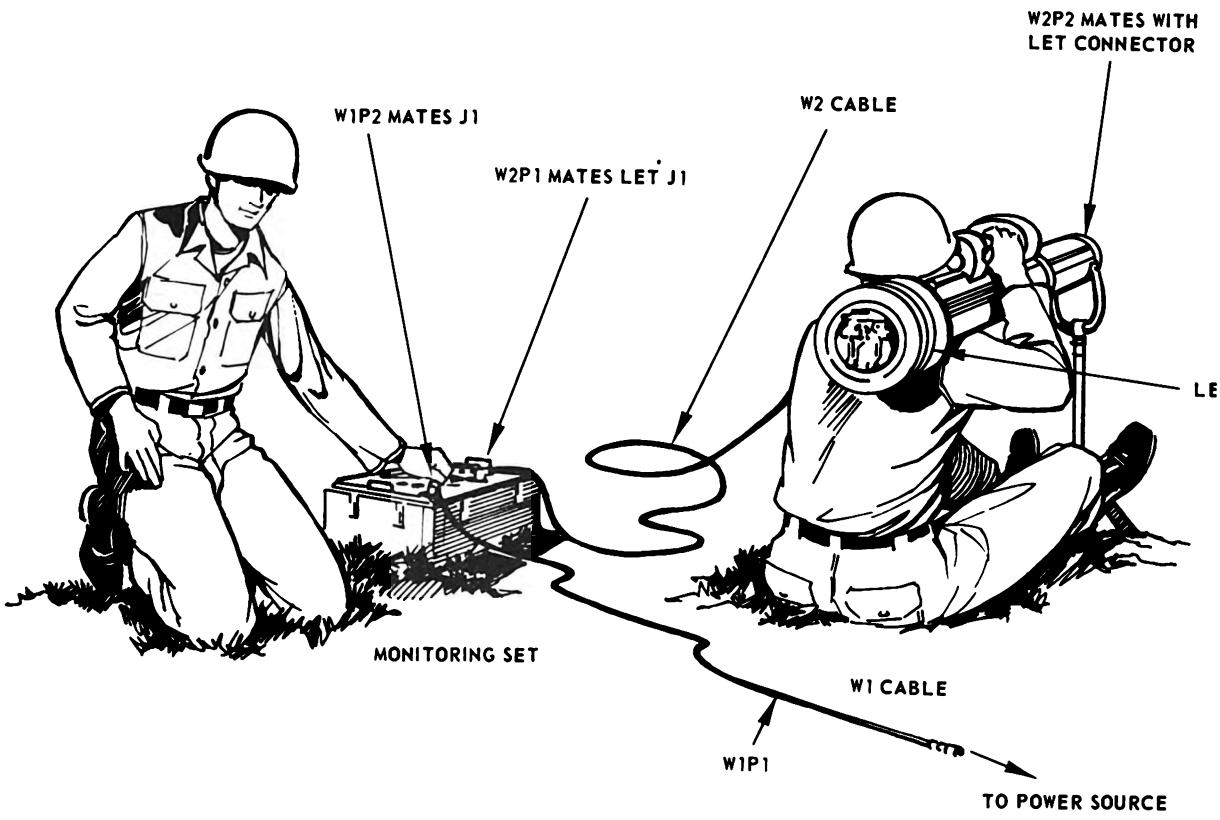

Figure 1. LET/monitoring set cable connections.

Note. If an external power source is to be used to operate the monitoring set, connect the monitoring set battery charging cable W1P2 to the power input connector. Make one of the following additional cable connections, depending on the type external power source being used (fig 2).

a. For 24/30 volt DC external power source, connect battery charging cable W3P2 to W1P1; then connect W3P1 to the external power source.

b. For 105/130 volt AC, 60 cycle external power source, connect battery charging cable W4P2 to W1P1; then connect W4P1 to the external power source.

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PERFORMANCE MEASURES (cont)

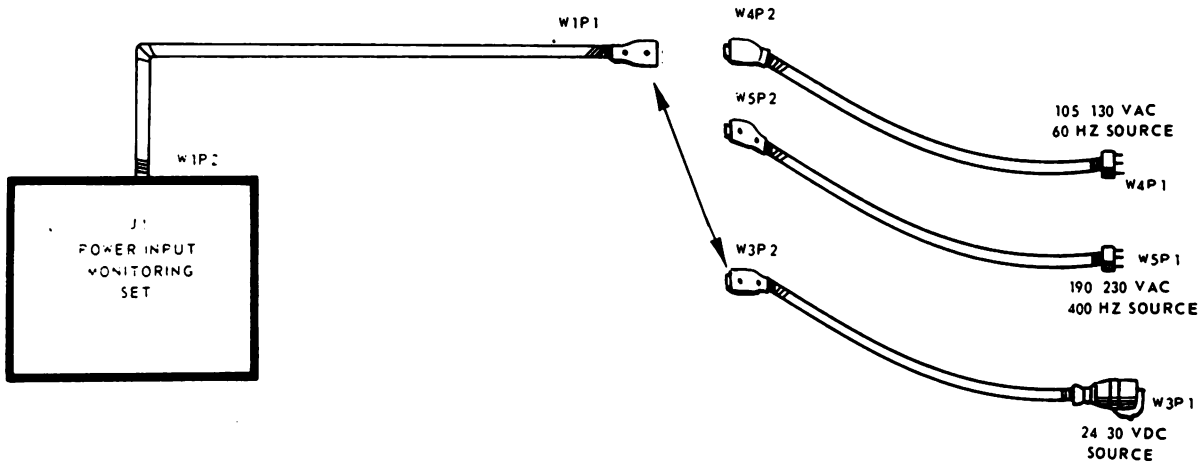

Figure 2.

3. Prepare the launch effects trainer (LET) for operation.

   a. Unsnap the LET bipod retaining strap. Grasp the bipod and push it down and forward until it locks into the extended position.

   b. Depress the bipod brake assembly on the lower bipod tube assembly and extend the bipod legs.

   c. Remove the LET battery access covers, using a flat tip screwdriver.

   d. Install 16 BA 30 or 16 W-B-101 batteries in the tubes (8 per tube) according to the decal in the battery tubes.

   e. Replace the access covers and tighten the thumbscrews finger tight.

   f. Install the tracker.

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TASK SUMMARY 071-317-3330 (cont)

PERFORMANCE MEASURES (cont)

(1) Remove the tracker electrical connector protective cover and the electrical protective cover on the LET.

(2) Position the forward and rear tracker guide pins in the tracker support guide rails.

(3) Slide the tracker to the rear until it locks into position.

(4) Remove the tracker lens cover by pulling it straight forward.

REFERENCES

TC 23-24, Assault Weapon System M47, chap 5, pp 41 and 43, para 5-1 thru 5-3, sec I.

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OCCUPY A TOW FIRING POSITION

CONDITIONS

As a squad leader, given a squad sector of fire, the general location of a firing position, and a vehicle-mounted TOW weapon system.

STANDARDS

The position occupied must, as a minimum:

1. Cover the sector of fire.
2. Use natural cover and concealment.
3. Avoid conspicuous terrain features.

PERFORMANCE MEASURES

1. Approach the general location of a firing position from the rear or flank using terrain-driving techniques. Stop the vehicle short of the location in a covered and concealed position, dismount, and reconnoiter the general location for the exact firing position.
2. Determine if the TOW should be employed mounted or dismounted. It may be necessary to dismount the TOW and carry it to the firing position if the terrain prevents the vehicle from moving to the position or if the vehicle cannot be concealed.
3. Always attempt to find a mounted firing position. This increases the flexibility of the squad by using the minimum amount of time in displacing to new positions.
4. An ideal TOW position is one that allows for a flank engagement, offers concealment of the flash and weapon signature, has the weapon defiladed from the direction of approaching opposing force (OPFOR) vehicles, and offers concealment to the front. You should strive for a flank engagement (especially at ranges of 1,500 - 2,000 meters where OPFOR tank guns have a better than 50/50 chance of a first-round hit) because:
   a. An advancing tank's firepower and observation are generally oriented to the front, making it difficult to detect and retrace a TOW launched from its flank.

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PERFORMANCE MEASURES (cont)

b. Armor plating on the sides of an OPFOR tank is thinner, which will help ensure a kill. You should strive to find a position that will conceal the flash and signature because a tank trailing the one fired on may sight your launch signature and fire on your position. This is the reason you should attempt to find a defiladed position. Defiladed means there is something between your position and the tanks not being fired on, e.g., a parapet, wall, or natural cover. Naturally, if your position is concealed to the front, your chances of being detected before firing are minimized.

5. Make sure the position you occupy will:

a. Cover the sector of fire. Covering the squad sector of fire means that you can see and engage targets in it while avoiding detection yourself. The position selected should be one that has the best shot into the assigned sector of fire (preferably a flank shot). If you have been assigned a sector of fire where there is no position available to see and engage targets, notify your sector leader immediately. If you have deadspace in your sector of fire, make sure your sector leader is aware of this so he can arrange the section to best cover the assigned section of fire, and so he can designate primary and alternate positions.

b. Use natural cover and concealment.

(1) Virtually every piece of terrain has features that can enhance or degrade mission accomplishment with the TOW. Some terrain features that will serve to maximize the chances for success of the TOW and minimize its vulnerability due to detection are:

(a) The military crest of hills (not near good reference points).

(b) The reverse slope of hills to fire at the rear or flank of OPFOR vehicles.

(c) The edge of a woodline.

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PERFORMANCE MEASURES (cont)

(2) Use the terrain to your advantage for cover from enemy fire and for concelament from enemy ground and aerial observation. Since perfect cover and concealment will not always be available, priorities must be established. The terrain characteristics you must look for in picking a position are (in the order of their desirability):

(a) Cover and concealment.

(b) Cover.

(c) Concealment.

(d) Partial cover.

Note. Concealment of the flash and signature is an overall essential factor.

(3) When analyzing the terrain in your sector, consider the proper use of high ground. This can gain your crew protection and optimize TOW standoff. Position the TOW far enough back on the high ground so it can cover its sector of fire, yet be protected from tank fire closer than 1,500 meters because of deadspace.

(4) At times, you may have to use shadows for concealment. When this happens, vehicles must be moved as the shadows shift. If a vehicle is located under a tree, and the shadows and foliage do not give enough concealment from the air, the vehicle should be camouflaged with branches.

Note. The range card must reflect the change in vehicle position because of the shift of the vehicle position when the shadows move.

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PERFORMANCE MEASURES (cont)

c. Avoid conspicuous terrain features. Avoid road junctions, hilltops, lone buildings or trees, or other obvious positions. These attract the enemy's attention, and his artillery will probable have registered on them.

Note. You must have communication with the section leader or whomever is controlling your fire. Therefore, the position must allow for radio communication, wire communication, or visual communication. Preferably, the position will allow for a combination of these so one can be used as a backup.

6. Once you determine the exact location of the firing position, select a concealed route to it and call the vehicle forward and guide it into position.

7. If you determine there is no position within your sector that has natural concealment from enemy ground or aerial observation, and/or you determine it is not practical to camouflage the position with artificial materials, the weapon should be positioned in a nearby covered and concealed location, preferably, a hide position. The weapon should remain there until it actually engages targets from its primary or supplementary firing positions. When the weapon is located in a hide position, an observer from the squad remains at the firing position; when targets appear, he calls the TOW forward and points out the targets to the gunner. The observer must have binoculars, as well as communication with the crew. If the observer does not have visual contact with the crew, then a field telephone should be installed between them.

REFERENCES

TC 7-24, Antiarmor Tactics and Techniques for Mechanized Infantry, app B.

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INSTALL A HASTY PROTECTIVE MINEFIELD

CONDITIONS

In daylight or darkness, given platoon leader's mission directive, platoon personnel with TOE tools and equipment, lensatic compass, necessary mines and material, and DA Form 1355-1-R (Hasty Protective Minefield Record). You have been placed into a situation in which a minefield is to be used to supplement a defensive position. Engineer assistance is not available or needed. You will use the allocated antitank mines (M21), antipersonnel mines (M16A1) with tripwires, and claymores (M18A1) from the company basic load.

STANDARDS

Assist the platoon leader or, as an acting platoon leader, accomplish the following, in order:

1. Report intention to lay a hasty protective minefield and obtain authorization to lay.

2. Make a reconnaissance. Determine the best locations for mines based on likely enemy avenues of approach, and your platoon's ability to keep the mines under observation.

3. Report initiation of the minefield.

4. Emplace the mines on the avenues of approach. Do not arm the mines at this time.

   a. Use only metallic mines.

   b. Don't use boobytrap devices.

5. Record the minefield on DA Form 1355-1-R.

6. Arm the mines, working from the enemy side to the friendly side.

7. Report completion of the minefield.

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PERFORMANCE MEASURES

1. Use only metallic mines. If the mines cannot be found when the field is removed by hand, a metallic mine detector (AN/PSS-11) can be employed to help locate the lost mines.

2. Do not use boobytrap devices. These devices will seriously delay removal of the minefield.

3. Report intention. You must get permission from your company commander to install a hasty protective minefield. Request permission in person or by radio.

4. Make a ground reconnaissance. A reconnaissance is conducted to determine:

   a. Armor approaches into the platoon area and the points on these approaches most restrictive to armor movement (e.g., bridges or fords, areas which canalize movement, etc.).

   b. Dismounted avenues of approach into the platoon area.

   c. Likely areas of movement which would be used by enemy infantry to neutralize your antitank mines.

   d. Exact locations (within a through c above) which provide natural camouflage for your mines and permit coverage by fire from your positions. (See fig 1).

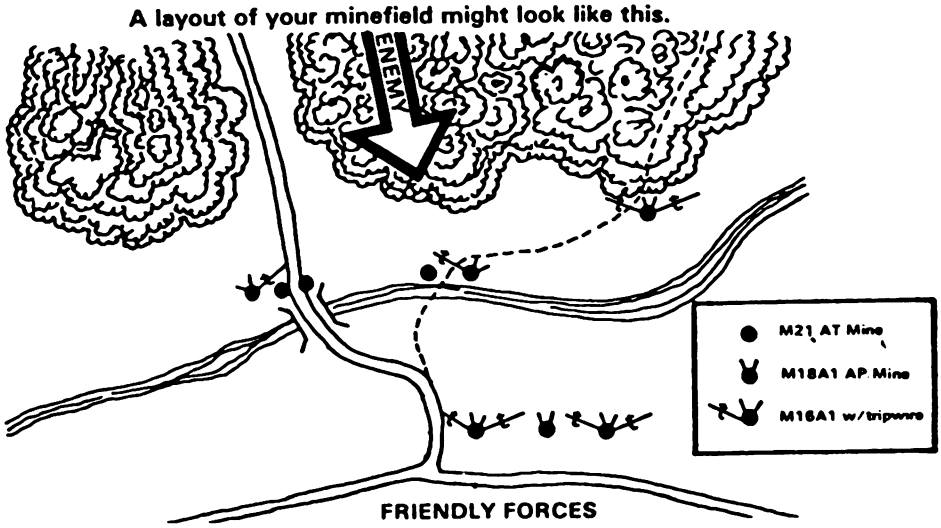

Figure 1.

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PERFORMANCES MEASURES (cont)

5. Submit initiation report. Once you have completed your reconnaissance, you must inform the company commander. After this, you are ready to begin laying the minefield.

6. Emplace and record minefield.

   a. After you have selected the exact locations for your mines, effectively use your manpower to install them. Weigh all of your tasks in choosing the number of men to be used. Once emplacement has begun, insure that your men are following the procedures outlined in the tasks:

      Install (fire), recover an M18A1 claymore mine (see Task Summary 051-192-1008, Emplace and Recover an Electrically Armed Claymore Mine).

      Install the M21 metallic antitank (AT) mine (see Task Summary 051-192-1516, Emplace and Recover an M21 Antipersonnel Mine).

      Install the M16A1 bounding antipersonnel mine (with/without tripwires) (see Task Summary 051-192-1515, Emplace and Recover an M16A1 Antipersonnel Mine).

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PERFORMANCES MEASURES (cont)

Note. Do not allow mines to be armed at this time.

b. While the mines are being placed, find an easily identifiable reference point in front of your position. At the reference point, mentally visualize your minefield, running in rows, parallel to your position. Designate the row closest to the enemy as row A, with succeeding rows B, C, etc. The ends of each row will be designated with row markers (which may be wooden stakes, steel pickets, etc.).

7. Record the minefield on DA Form 1355-1-R.

a. You will need a lensatic compass to measure azimuths. Use the instructions and example shown on the back of the DA Form 1355-1-R, as shown in figure 2.

b. Tie in the reference point with a permanent landmark that can be found on your map. Measure and record the distance and azimuth from this landmark to the reference point.

c. Have your men arm and camouflage the mines, working from the mine nearest the enemy back to the platoon position.

8. Report completion of minefield. After the field is laid and the paperwork is done, call your commander and report that you have completed the field.

9. Remember to use the hasty protective minefield often enough so that it becomes a comfortable part of your operation.

10. Always integrate these mines with your other defensive plans.

REFERENCES

FM 20-32, Mine/Countermine Operations at the Company Level, chap 4, sec II, p 22.
TC 20-32-1, Hasty Protective Mining, pp 1 thru 20.

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PERFORMANCES MEASURES (cont)

INSTRUCTIONS

1 DESIGNATE AN EASILY IDENTIFIABLE REFERENCE POINT ON THE GROUND (A TREE, A STUMP, A STAKE OR THE LIKE) ORIENT THE FORM (THE BLANK FORM ON THE REVERSE) BY TYING IN THE CENTER POINT OF CIRCLES TO THE DESIGNATED REFERENCE POINT ON THE GROUND

2 TIE IN REFERENCE POINT TO A LAND-MARK, SUCH AS A ROAD JUNCTION, HOUSE CORNER, ETC. THAT CAN BE FOUND ON A STANDARD MILITARY MAP

3 COMPLETE THE AZIMUTH BLOCK

4. COMPLETE THE FOLLOWING INFORMATION IN THE IDENTIFICATION BLOCK: UNIT, REF PT, REMARKS, MAP, AND SHEET NO, OIC, NAME, SSAN.

5. STARTING FROM THE REFERENCE POINT, RECORD THE MAGNETIC AZIMUTH IN DEGREES (°) AND DISTANCE IN PACES (P) OF EACH LEG FROM THE FRIENDLY POSITION TOWARD THE ENEMY POSITION AND FROM RIGHT TO LEFT OR LEFT TO RIGHT ACROSS EACH ROW OF MINES. HOWEVER, ALL ROWS MUST BE RECORDED IN THE SAME DIRECTION. WHICHEVER DIRECTION IS USED, THE STARTING POINTS OF THE ROWS MUST BE MARKED A1, B1, ETC., AND THE ENDING POINTS MARKED A2, B2, ETC., AS SHOWN IN THE EXAMPLE. EACH MINE IN EACH ROW WILL BE NUMBERED SEQUENTIALLY FROM THE STARTING POINT TO THE LAST MINE IN THE ROW.

6. FILL IN THE TABULAR BLOCK (SEE EXAMPLE)

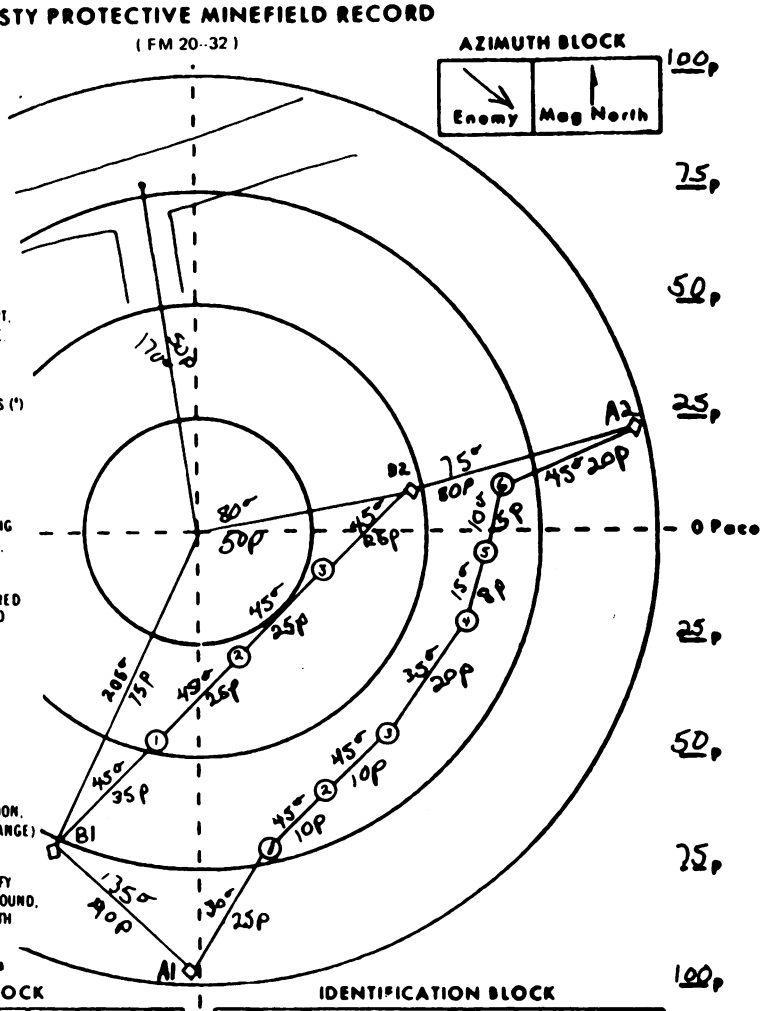
7. FILL IN THE SCALE BEING USED WHERE SPACE IS PROVIDED "SCALE 2CM=" AND FILL IN THE PACE (P) READINGS IN THE RIGHT MARGIN

8 MAKE ALL MINEFIELD REPORTS (INTENTION, INITIATION, COMPLETION, TRANSFER AND CHANGE) BY SOME SECURE MEANS.

9 NOTE WHAT HAS BEEN USED TO IDENTIFY A1 & B1: I.E., 2x4 DRIVEN FLUSH WITH GROUND, STEEL PICKET OR FENCE POST WRAPPED WITH ENGINEER TAPE, ETC

HASTY PROTECTIVE MINEFIELD RECORD

(FM 20-32)



SCALE: 2cm = 25 paces

TABULAR BLOCK

Row	Type	Actuation	Mine number
A	M16A1	TRIPWIRE	1, 2, 6
	M21	CONTROLLED	3, 4, 5
B	M16A1	TRIPWIRE	1, 3
	M18A1	PRESSURE	2

Remarks: LANDMARK IS ROAD JUNCTION AT NA1234409

IDENTIFICATION BLOCK

Unit: 2ED PLT, A Co 1-4th 2 BDE, 1CAV DIV	
Ref Pt: TREE STUMP SIDE OF ROAD	
Remarks: POINTS A1 & A2, B1 & B2 ARE MARKED WITH 2"x2" STAKES	
Map & Sheet No: TALBOT 5568	
Name of OIC: LT. ALLAN	
Signature: [signature]	Time & Date: 1500 6 JUL 75
Mines removed	
Mines transferred	

DA FORM 1355-1-R.

Figure 2. Hasty protective minefield record form (reverse).

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PERFORMANCES MEASURES (cont)

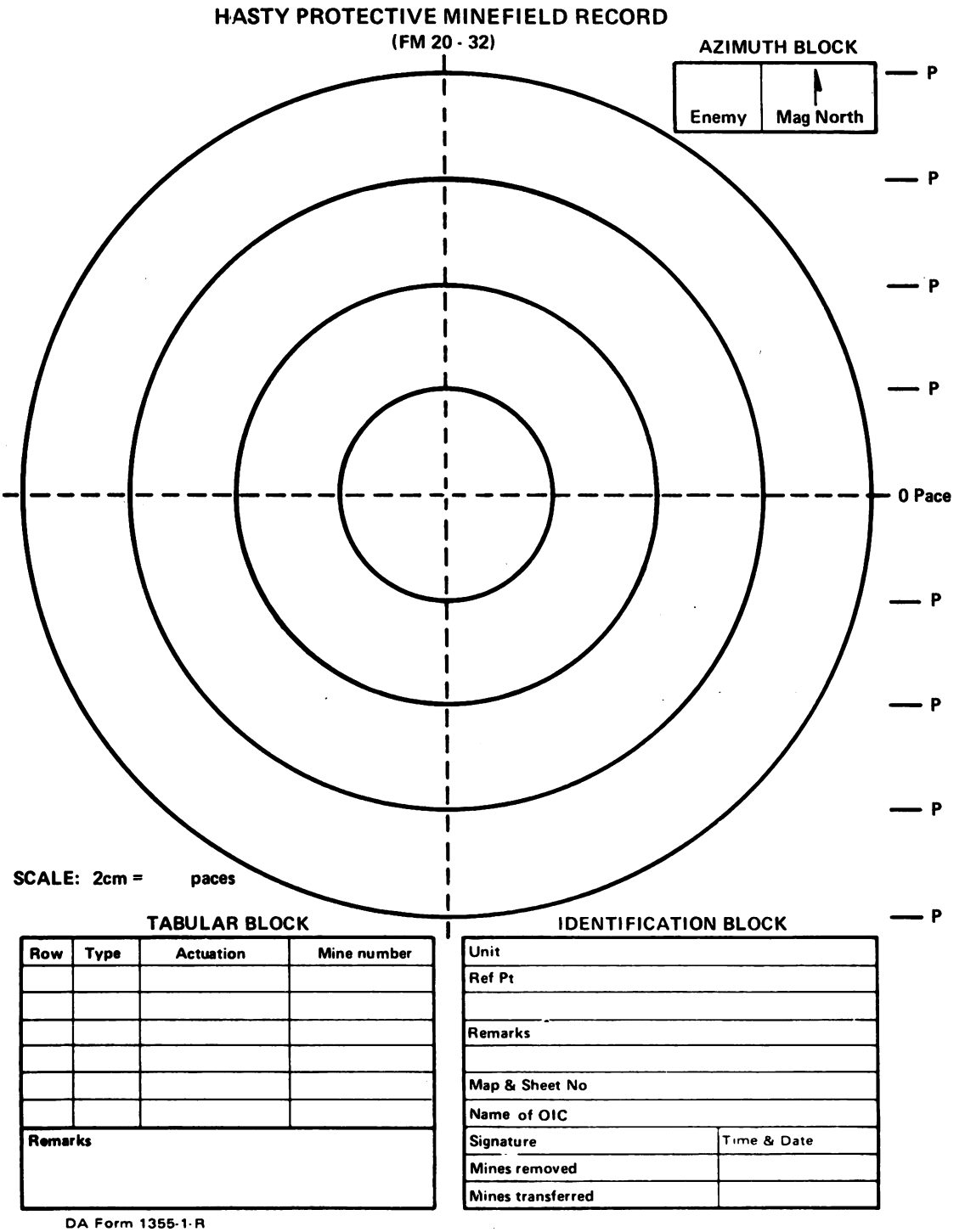

Figure 2 (cont). Hasty protective minefield record form (face).

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CREATE OBSTACLES USING DEMOLITIONS

CONDITIONS

Given pencil, paper, demolitions card (GTA 5-10-28), demolition equipment, a scout squad, and a designated site. The obstacle site is protected by other obstacles and covered by friendly fires.

STANDARDS

You must create an obstacle which cannot be easily bypassed. The charges you emplace must cut, crater, or breach the first time they are detonated.

PERFORMANCE MEASURES

Note. All figure references are to GTA 5-10-28.

1. Select the site for a demolition obstacle. The platoon leader will specify the type of obstacle to be created and its general location. You must select its exact site except for bridges. These guidelines apply to all obstacles:

   a. Select a site that cannot be easily bypassed. It does no good to create an obstacle that the enemy can bypass without even slowing down.

   b. Select a site that is protected by other obstacles. These may be existing (dense woods, cliffs, or rivers) or reinforcing (mine fields).

   c. Select a site that can be covered by friendly fires. It does no good to create an obstacle the enemy can easily destroy, remove, or repair.

2. Calculate the demolition charge necessary to create a desired demolition obstacle (see GTA 5-10-28, figs 1 thru 4). All calculations must be correct.

   a. Determine the type of charge to be used.

      (1) Timber cutting charge (fig 1).
      (2) Steel cutting charge (fig 3).

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PERFORMANCE MEASURES (cont)

(3) Cratering charge (fig 3).
(4) Breaching charge (figs 2 and 4).

b. Calculate the necessary charge from the information provided on GTA 5-10-28 (see example below).

(1) Using the problem solving format on page 2 of the GTA, identify and measure the critical dimensions.

(2) Calculate the amount of TNT necessary.

(3) Divide by the relative effectiveness factor for the type of explosive you are using.

(4) Round up to the next package size. This gives the amount of explosive necessary for one charge.

(5) Calculate the number of charges.

(6) Calculate the total amount of explosive.

EXAMPLE.

Create an abatis. You have Charge Demolition: M112 Block, Composition C-4. The trees are 24 inches thick. There are 50 trees.

1. The critical dimension is 24 inches.

2. Cross reference "24 inches" and "abatis" on the Timber Cutting Charges chart (fig 1). The answer is 11.5 pounds of TNT.

3. Divide 11.5 by 1.34 (the relative effectiveness factor of Composition C-4)(see characteristics of Demolition Charges chart, fig 1). This gives you 8.58 pounds of Composition C-4.

4. Divide 8.58 by 1.25 (the package size charge, Demolition: M112 Block, Composition C-4, fig 1). This gives 6.86 blocks of Composition C-4. Round this up to 7 blocks.

5. The 50 trees equal 50 charges.

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PERFORMANCE MEASURES (cont)

6. The 50 charges of 7 blocks equal 350 blocks or 437.5 pounds of Composition C-4.

3. Supervise the placement of the demolition charges.

   a. Tell the section members how much explosive to use.

   b. Inspect the emplaced demolition charge to ensure that the section members used the proper amount of explosive, that the charge is emplaced and secured properly, and that the detonating system is assembled correctly (see Task Summary 051-193-1504, Assemble a Non-Electric/Electric Detonation System).

4. Ensure that all section members move a safe distance away (GTA 5-10-28, fig 1).

5. Detonate the demolition system to create the demolition obstacle.

REFERENCES

FM 5-25, Explosives and Demolitions, chaps 3 and 4, pp 3-1 thru 4-63.
GTA 5-10-28, Demolition Card.

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PREPARE THE RATER'S SECTION OF AN ENLISTED EVALUATION REPORT (EER)

CONDITIONS

Given DA Pam 623-1, the unit rating scheme, a DA Form 2166 (the Enlisted Evaluation Report) with Part I completed, a number 2 lead pencil, and a pen with black ink.

STANDARDS

1. Assurance will be made that Part I, DA Form 2166-5, has been properly prepared by the Military Personnel Office (MILPO).

2. Parts II and III, DA Form 2166-5, will be completed in accordance with DA Pam 623-1.

3. After signing the report, the rater will counsel the soldier as appropriate.

4. The Enlisted Evaluation Report (EER) will be forwarded to the indorser in accordance with the rating scheme.

PERFORMANCE MEASURES

Note. The MILPO completes Parts I and VII of the report. You, the rater, complete Parts II and III, and the indorser completes Parts II and IV. The rated soldier completes Part V after he has been counseled by the rater and, if appropriate, the indorser (see DA Pam 623-1). The MILPO is responsible for establishing procedures to obtain the rated soldier's signature in Part V. The reviewer completes Part VI only after Part I thru V have been completed.

1. Review Part I for obvious errors. If known errors exist, make corrections in black ink.

2. Complete Part II of the EER as follows:

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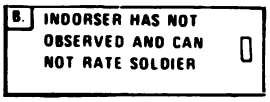
TASK SUMMARY 121-030-2501 (cont)

PERFORMANCE MEASURES (cont)

a. Block A. Enter the actual duties performed by the rated soldier, including additional duties.

A. BRIEF DESCRIPTION OF DUTIES	Soldier performs duty as rifleman in a mechanized rifle platoon. Disperses small arm fire toward enemy when required to do so.

b. Block B. This block is not applicable to the rater. It will be completed by the indorser if appropriate.



c. Block C. Two selections are possible. Use a number 2 lead pencil to mark the appropriate box indicating frequency of contact. If applicable, also mark the "reports and records" box. As the rater, you will mark items on the line following the "R" only.

d. Block D. Mark the "yes" or "no" box as appropriate. A "no" response here requires explanation in Block J.

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PERFORMANCE MEASURES (cont)

e. Block E. Rate the individual carefully on each of the 10 performance traits by marking the appropriate box for each trait. Mark the ratings on the basis of the given rating scale. Enter the score for each trait in black ink in the score box in the right-hand column under "R." Add the scores in the "R" column and enter the sum in the totals box at the bottom of the column. Also enter the total in the appropriate box in Block H. Use the same marking procedures for Blocks F and G and the appropriate boxes in Block H. If the score for Block E exceeds 40 or is less than 10, justify in Block J.

E. DUTY PERFORMANCE TRAITS	RANKS WITH VERY BEST	SUPERIOR TO MOST		EXCEEDS OR MEETS DUTY REQUIREMENTS		NEEDS IMPROVEMENTS		SCORE	
						Some	Much		
		5	4	3	2	1	0	R	I
1. Is well informed on all phases of assigned duties. (Scope of knowledge about duties)	R	■	□	□	□	□	□	5	
	I	□	□	□	□	□	□		
2. Carries out orders without constant supervision. (Dependability in performing without supervision)	R	□	■	□	□	□	□	4	
	I	□	□	□	□	□	□		
3. Shows interest and enthusiasm for duties. (Attitude toward duties)	R	□	■	□	□	□	□	4	
	I	□	□	□	□	□	□		
4. Demonstrates qualities of leadership. (Exerts positive influence on others)	R	■	□	□	□	□	□	5	
	I	□	□	□	□	□	□		
5. Seeks out opportunities for self-improvement. (Effort directed toward realization of potential)	R	□	■	□	□	□	□	4	
	I	□	□	□	□	□	□		
6. Displays ability to initiate action without direction from others. (Aggressive pursuit of methods to improve duty performance)	R	□	■	□	□	□	□	4	
	I	□	□	□	□	□	□		
7. Is successful in working with others. (Ability to work in harmony with others)	R	■	□	□	□	□	□	5	
	I	□	□	□	□	□	□		
8. Personal behavior sets a good example for others. (High standards of personal conduct)	R	■	□	□	□	□	□	5	
	I	□	□	□	□	□	□		
9. Takes pride in dress and appearance. (Neat and military in bearing)	R	□	■	□	□	□	□	4	
	I	□	□	□	□	□	□		
10. Is physically fit, as required, for MOS/grade during combat. (Physical condition)	R	■	□	□	□	□	□	5	
	I	□	□	□	□	□	□		
							TOTALS	45	

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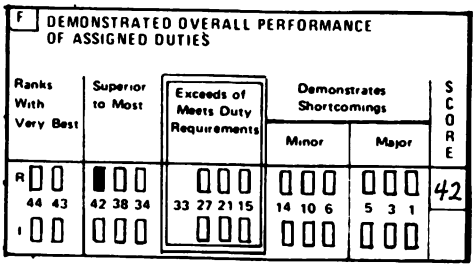
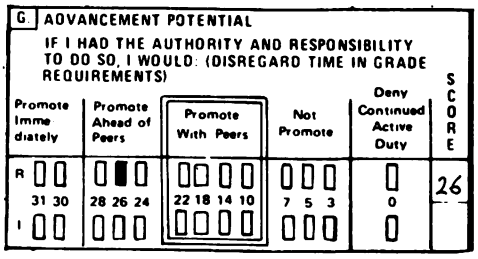
PERFORMANCE MEASURES (cont)

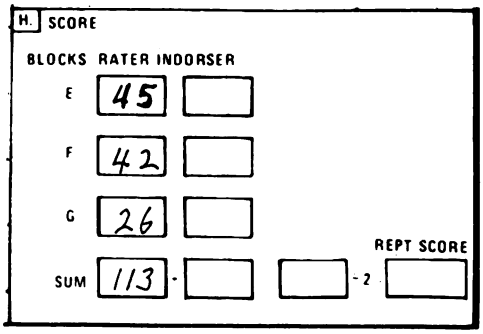
f. Block F. In this block, rate the soldier's strengths and weaknesses, using the yardstick of overall performance. If the score exceeds 42 or is below 6, justify in Block J.



g. Block G. Rate the soldier on his ability to perform in the next higher grade. Consider his total capacity in comparison with other individuals of the same grade and length of service. If the score exceeds 22 or is below 10, justify in Block J.



h. Block H. Enter the scores from Blocks E, F, and G in the appropriate boxes in Block H. Add these three scores and enter the total in the first "SUM" box. Make entries in black ink.



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PERFORMANCE MEASURES (cont)

i. Block I. In this block, make recommendations for logical career development, such as advanced schooling and special assignments. The entry should be typed or printed in black ink.

I. CAREER DEVELOPMENT (RECOMMENDATIONS ON SCHOOLING AND ASSIGNMENTS)
Recommend DA NCO Development Course for individual.

j. Block J. Enter all the mandatory comments to justify ratings in Blocks E, F, and G and the response in Block D. In addition, enter any other comments about the soldier's performance, regardless of scores. All comments should be typed or neatly printed in black ink.

J. 1. COMMENTS ARE MANDATORY TO JUSTIFY RATINGS IN PART II AS FOLLOWS: a. BLOCK E SCORE BELOW 10 OR OVER 40, BLOCK F SCORE BELOW 6 OR OVER 42, BLOCK G SCORE BELOW 10 OR OVER 22, OR BLOCK D IF SOLDIER DOES NOT SUPPORT ARMY'S EQUAL OPPORTUNITY PROGRAM. b. INDORSER WHO CHECKS BLOCK H B. 2. REMARKS OTHERWISE OPTIONAL.
RATER Reference will not be made to a punitive or an administrative action or an investigation which has not been processed to completion, adjudication, and final action. For additional restrictions and circumstances which preclude comments being made on the EER, refer to paragraph 8-5, AR 600-200.

3. Complete Part III. Except for the signature, all entries must be typed or printed in black ink. Use black ink for the signature. Make sure your authentication date is in accordance with AR 600-200 and the type of report being prepared.

A. ORGANIZATION AND DUTY ASSIGNMENT	B. NAME AND GRADE	C. DATE
Co C, 1ST BN, 26TH INF APO NY 09039 SQD LDR	CHARLES A DELLEN SSG	5 JAN 1976
	D. SIGNATURE Charles A. Dellen	

4. After signing the report, discuss it with the rated soldier and counsel him. If the report is adverse, inform the soldier of the nature of the report and tell him that the MILPO provides guidance for the submission of appeals.

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PERFORMANCE MEASURES (cont)

ENLISTED EVALUATION REPORT (AR 600-200)

For preparation, see DA Pamphlet 623-1

C. SSN

PART I PERSONAL DATA

A. GRADE (ABBR) NAME (LAST) (FIRST) (MI) SSN: SP4 Doe, John E. 000-00-0000

B. TYPE OF REPORT: INIT [ ] ANL [X] CR [ ] SP [ ] OTHER [ ] SPECIFY

D. ORGANIZATION AND STATION: Co C, 1st Bn, 26th Inf APO NY 09039

E. PMOSC: 11B10

F. OMOSC: 11B10

G. SMOSC: 95B10

H. PERIOD OF REPORT
BEGIN MO: [ ] YR: 74 [X] 76 77 78 79 80 81 82 83 84 85
END MO: [ ] YR: 74 [X] 76 77 78 79 80 81 82 83 84 85

I. NONRATED PERIOD
NO. OF MONTHS ____
REASON CODES ____

J. DUTY POSITION TITLE: Rifleman
AUTH PAY GR E4

PART II RATINGS

A. BRIEF DESCRIPTION OF DUTIES

B. INDORSER HAS NOT OBSERVED AND CAN NOT RATE SOLDIER [ ]

C. REPORT BASED ON: DAILY CONTACT [X] FREQ OBSN [ ] INFREQ OBSN [ ] REPT & REC [ ]

D. SOLDIER SUPPORTS THE ARMY'S EQUAL OPPORTUNITY PROGRAM: YES [X] NO [ ]

E. DUTY PERFORMANCE TRAITS	RANKS WITH VERY BEST 5	SUPERIOR TO MOST 4	EXCEEDS OR MEETS DUTY REQUIREMENTS 3	2	NEEDS IMPROVEMENTS Some 1	Much 0	SCORE R	I
1. Is well informed on all phases of assigned duties. (Scope of knowledge about duties)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	5	
2. Carries out orders without constant supervision. (Dependability in performing without supervision)	[ ]	[X]	[ ]	[ ]	[ ]	[ ]	4	
3. Shows interest and enthusiasm for duties. (Attitude toward duties)	[ ]	[X]	[ ]	[ ]	[ ]	[ ]	4	
4. Demonstrates qualities of leadership. (Exerts positive influence on others)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	5	
5. Seeks out opportunities for self improvement. (Effort directed toward realization of potential)	[ ]	[X]	[ ]	[ ]	[ ]	[ ]	4	
6. Displays ability to initiate action without direction from others. (Aggressive pursuit of methods to improve duty performance)	[ ]	[X]	[ ]	[ ]	[ ]	[ ]	4	
7. Is successful in working with others. (Ability to work in harmony with others)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	5	
8. Personal behavior sets a good example for others. (High standards of personal conduct)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	5	
9. Takes pride in dress and appearance. (Neat and military in bearing)	[ ]	[X]	[ ]	[ ]	[ ]	[ ]	4	
10. Is physically fit, as required, for MOS/grade during combat (Physical condition)	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	5	
						TOTALS	45	

F. DEMONSTRATED OVERALL PERFORMANCE OF ASSIGNED DUTIES

Ranks With Very Best	Superior to Most	Exceeds or Meets Duty Requirements	Demonstrates Shortcomings: Minor	Demonstrates Shortcomings: Major	SCORE
R [ ] [ ]	[X] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	42
44 43	42 38 34	33 27 21 15	14 10 6	5 3 1	
I [ ] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	

G. ADVANCEMENT POTENTIAL
IF I HAD THE AUTHORITY AND RESPONSIBILITY TO DO SO, I WOULD (DISREGARD TIME IN GRADE REQUIREMENTS)

Promote Immediately	Promote Ahead of Peers	Promote With Peers	Not Promote	Deny Continued Active Duty	SCORE
R [ ] [ ]	[ ] [X] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ]	[ ]	26
31 30	28 26 24	22 18 14 10	7 5 3	0	
I [ ] [ ]	[ ] [ ] [ ]	[ ] [ ] [ ] [ ]	[ ] [ ] [ ]	[ ]	

H. SCORE

BLOCKS	RATER	INDORSER
E	45	
F	42	
G	26	
SUM	113	· [ ] [ ] - 2 [ ]

REPT SCORE

DA Form 2166-5, 1 July 1975

Figure 1.

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TASK SUMMARY 121-030-2501 (cont)

PERFORMANCE MEASURES (cont)

RATED SOLDIER'S LAST NAME AND SSN		
PART II CONTINUED		
I CAREER DEVELOPMENT (RECOMMENDATIONS ON SCHOOLING AND ASSIGNMENTS)		
J 1. COMMENTS ARE MANDATORY TO JUSTIFY RATINGS IN PART II AS FOLLOWS: a. BLOCK E SCORE BELOW 10 OR OVER 40, BLOCK F SCORE BELOW 6 OR OVER 42, BLOCK G SCORE BELOW 10 OR OVER 20, OR BLOCK D IF SOLDIER DOES NOT SUPPORT ARMY'S EQUAL OPPORTUNITY PROGRAM. b. INDORSER WHO CHECKS BLOCK II B. 2. REMARKS OTHERWISE OPTIONAL.		
RATER		
INDORSER		
PART II RATER AUTHENTICATION		
A ORGANIZATION AND DUTY ASSIGNMENT	B NAME AND GRADE TIMOTHY E. KREBS, E6	C DATE
	D SIGNATURE	
PART IV INDORSER AUTHENTICATION		
A ORGANIZATION AND DUTY ASSIGNMENT	B NAME AND GRADE LARRY A. WILDMAN, 01	C DATE
	D SIGNATURE	
PART V SOLDIER AUTHENTICATION		
A	B NAME AND GRADE ROGER W. CASALENGO, E4	C DATE
	D SIGNATURE	
PART VI REVIEWER AUTHENTICATION		
A		
B ORGANIZATION AND DUTY ASSIGNMENT	C NAME AND GRADE WILLIAM C. THOMAS 03	D DATE
	E SIGNATURE	
PART VII MILPO CERTIFICATION		
A DATE REPORT ENTERED ON DA FM 2-1:	C	D
B SOLDIER'S COPY: GIVE TO SOLDIER [ ] FORWARDED TO SOLDIER [ ] MAILED TO SOLDIER [ ] CERTIFIED MAIL NO _____	MILPO SIGNATURE	UIC

Figure 1. (cont)

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PERFORMANCE MEASURES (cont)

5. Forward the EER to the soldier's indorser in accordance with the unit rating scheme.

   Note. A special report requires a field grade officer in direct line of supervision over the rated soldier to act as reviewer.

6. See figure 1 for a completed example (rater's section only) of an EER.

REFERENCES

AR 600-200, Enlisted Personnel Management System.
DA Pamphlet 623-1, Preparation of Enlisted Evaluation Reports.

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SUPERVISE OPERATOR/CREW MAINTENANCE

CONDITIONS

Given equipment with BII.

STANDARDS

Make sure the operator and crew are briefed concerning maintenance to be performed, appropriate TM to use, and task assignments as applicable. Also ensure that adequate resources are provided and any needed assistance is obtained from company maintenance. Make sure that procedures specified in the applicable TM are applied, and that completed work meets standards established during the briefing or in the TM. Make necessary corrections. Report progress, if required, and completion of work to your supervisor.

PERFORMANCE MEASURES

1. Determine what equipment is to be maintained. This may be specified by your supervisor.
2. Obtain operator/crew-level TM pertaining to the equipment to be maintained.
3. Perform an inspection of equipment to determine specific faults to be corrected or maintenance to be performed.
4. Brief personnel on maintenance to be performed and standards to be met.
5. When applicable, assign tasks as stated in TMs.
6. Allocate resources (time, personnel, tools, location) as necessary.
7. Periodically check work progress to make sure proper procedures are used, but do not oversupervise.
8. If needed, obtain assistance from the company maintenance section.
9. Inspect completed work and if necessary, make corrections.

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TASK SUMMARY 171-132-3001 (cont)

PERFORMANCE MEASURES (cont)

10. Report completion of work to your supervisor.

REFERENCES

FM 71-2, The Tank and Mechanized Infantry Battalion Task Force, chap 6, pp 6-11 thru 6-13.
FM 17-95, Cavalry, chap 7, pp 7-13 and 7-14.
FM 22-100, Military Leadership.
TM 5-5420-202-10, Operator's Manual: AVLB.
TM 9-2300-257-10, Operator's Manual: M113.
TM 9-2320-218-10,w/c 2, Operator's Manual: M151.
TM 9-2350-215-10, Operator's Manual: M60A1.
TM 9-2350-230-10, Operator's Manual: M551.
TM 9-2350-232-10, Operator's Manual: M60A2.
TM 9-2350-257-10, Operator's Manual: M60A1.
TM 9-2350-258-10, Operator's Manual: M48A5.
TM 38-750, The Army Maintenance Management System (TAMMS), para 3-4.

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INSPECT ORGANIZATIONAL HISTORICAL RECORDS

CONDITIONS

Given a DA Form 2408-1, DA Form 2408-4, and DA Form 2408-14 for the vehicle to be inspected; and TM 38-750.

STANDARDS

Detect and correct all errors on DA Form 2408-1, DA Form 2408-4, and DA Form 2408-14.

PERFORMANCE MEASURES

1. Inspect DA Form 2408-1.

    a. Obtain DA Form 2408-1 from the unit TAMMS clerk.
    b. Inspect block 1 for proper nomenclature and model number of the item.
    c. Inspect block 2 for appropriate serial number. Ensure the word "Registration" is lined out.
    d. Check to ensure blocks 3a, b, and c are filled in with pencil.
    e. Check block 3a and make sure service on lubrication symbol corresponds with the symbol entered on DD Form 314, such as Q, W, M, S, and L.
    f. Check blocks 3b and c for correct hours/miles and due date for next lubrication.
    g. Check first line for proper brought forward entry.
    h. Check column b for entry of proper reading from the hour meter and for end-of-the-day operation.
    i. Check column c for mileage entry for end-of-the-day operation.
    j. Check column d for entry for total fuel added during the day of operation.
    k. Check column e for lubricants added during the period of operation, should be entered for both transmission and engine in quarts symbol for change in CR.
    l. Check column f for appropriate symbol for uncorrected fault recorded on DA Form 2404.
    m. Check column f for any changes to equipment operational status.

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PERFORMANCE MEASURES (cont)

n. Check column g for operator signature.
o. Check column h for appropriate symbol for type of service performed in the type column. Ensure "yes" or "no" is entered in the complete column.
p. Check column i for appropriate symbol to identify lubrication or other type services or actions: air drops, oil filters, etc.
q. Omit column j, unless required by local SOP.
r. Check column k for signature of individual making entries other than operator or/crew chief.

2. Inspect DA Form 2408-4.

a. Check block 1 for correct cannon tube serial number.
b. Check block 2 for correct cannon type, model, and series; e.g., 105-mm M68.
c. Check block 3 for proper owning unit designation and unit idenification code (UIC).
d. Check block 5 for correct end item identification, to include serial number.
e. Inspect block 6 for correct equivalent full charge (EFC) factors for appropriate rounds. (See TM 9-1000-202-14 for EFC factors.)
f. Make sure block 7 reflects the correct cannon serial number (see TM 9-1000-202-14).
g. Check block 8 for the number of times the present breech ring has been retubed.
h. Inspect block 10, columns a through h, for the correct computation of the remaining life of the gun tube (see TM 9-1000-202-14).
i. Inspect block 10, column i, for information pertinent to the operation of the weapon; e.g., borescoping, gaging and recoil exercise.
j. Inspect block 10, column j, for appropriate signatures. The first signature on each form will be that of the company commander.

3. Inspect DA Form 2408-14.

a. Obtain DA Form 2408-14 from the unit TAMMS clerk.
b. Check block 1 for proper nomenclature.
c. Check block 2 for proper model number.
d. Inspect block 3 for proper serial number.
e. Inspect column a for proper status symbol.
f. Inspect column b for proper description of fault.

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PERFORMANCE MEASURES (cont)

g. Inspect column c for proper reason for delay in repairing fault.
h. Inspect column d for date of entry on this form.
i. Inspect column e for signature of the commanding officer or his designated representative.
j. Inspect form to make sure all items requested for your vehicle are entered on the DA Form 2408-14.

4. Make sure all errors are corrected.

REFERENCES

TM 38-750, The Army Maintenance Management System (TAMMS) C 2, para 4-5, 4-6, and 4-13.
Appropriate TM for vehicle being inspected.
Task Summary 171-530-1001, Make Operator's Entries in Organizational Historical Records (Skill Level 1).

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PREPARE AND CONDUCT A PERFORMANCE-ORIENTED TRAINING SESSION (INDIVIDUAL AND COLLECTIVE)

CONDITIONS

Given complete commander's guidance for preparation and conduct of a specific training session (individual or collective), an ARTEP applicable to your unit, Soldier's Manuals for the MOSs of your subordinates, FM 21-6, access to your unit's training aids and devices, TEC equipment, and training facilities/areas.

STANDARDS

Within the time and resource limits given in the commander's guidance, conduct the training session so that each individual or element(s) can perform to the standards specified and under the conditions listed in the commander's training objective.

PERFORMANCE MEASURES

1. Overview. The preparation and conduct of performance-oriented training (be it individual or collective, equipment or tactically oriented) consists of the three-step backward planning process:

   a. Describe the desired results of training.

   b. Prepare to conduct training.

      (1) Establish intermediate training objectives.

      (2) Determine and organize the training required.

   c. Conduct the training to standards.

2. Describe the desired results of training. If you are given complete guidance by your commander, this step is done for you. If not, you will have to complete it so that it is satisfactory to your commander. To be complete, it must include the following:

   a. WHAT SPECIFIC TRAINING OBJECTIVE DO YOU WANT ACCOMPLISHED? The training objective should include the task the soldier(s)

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PERFORMANCE MEASURES (cont)

4. References. Several references and aids can help you prepare to conduct training.

   a. FM 21-6, How to Prepare and Conduct Military Training, provides detailed discussion on the preparation and conduct of training.

   b. The ARTEP for your unit lists training objectives for most of the collective tasks with which you will be concerned.

   c. Soldier's Manuals list training objectives and intermediate training objectives for individuals for most of the training (both individual and collective) you will encounter. In addition, they provide training tips which can help you prepare.

   d. Training Extension Courses (TECs) develop (or will develop in the future) most of your intermediate training objectives into prepackaged lessons. In some cases they are hands-on, in others, you must complete the training by providing the performance practice and evaluation. In addition, the pretest for each lesson can help you identify which intermediate training objectives require (or do not require) training.

5. Conduct training to standards. The basics of the conduct of training are presented in Task Summary 171-896-2001, Conduct a Performance-Oriented Training Session. However, your performance of this step may involve a series of presentations of intermediate training objectives. In some cases, when collective training is involved, you will find the use of multiechelon training to be an efficient method of training. Despite the different name, remember the basics still apply. You might require assistant trainers (other squad leaders, for example) but the process of conducting training used by each remains the same:

   a. Explain and demonstrate.

   b. Conduct soldiers/teams/squad practice.

   c. Test.

   Note. Throughout your preparation, remember the key to success is a good training objective.

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PERFORMANCE MEASURES (cont)

must be able to perform, the conditions under which the soldier(s) must perform the task, and the training standard which specifies the proficiency the soldiers must attain.

b. TO WHOM WILL THE TRAINING BE GIVEN? (e.g., two squads.)

c. WHEN WILL THE TRAINING TAKE PLACE? (e.g., 1300 to 1700 hours, 25 September, 3 weeks from now.)

d. WHERE WILL THE TRAINING TAKE PLACE? (e.g., Training Area K.)

e. WHY DID THE COMMANDER DECIDE TO CONDUCT THE TRAINING? What were the reasons for his decision?

3. Prepare to conduct training. This step is usually the most time consuming and difficult of the three steps. Do not take it lightly. However, if done properly, it will ensure the success of your training effort. It consists of the following:

a. Establish intermediate training objectives by:

(1) Developing tasks required to accomplish the commander's training objective.

(2) Establishing the conditions under which each task must be accomplished.

(3) Establishing a training standard of performance for each task.

b. Determine and organize training required by:

(1) Determining which intermediate training objectives the soldiers cannot successfully perform without further training.

(2) Organizing the intermediate training objectives into a progressive sequence (simple to complex) consistent with the available resources.

(3) Estimating the training resources, trainer techniques, aids, and devices needed to accomplish each objective.

(4) Completing administrative requirements (e.g., obtaining equipment, writing the lesson plan, rehearsing training, etc.).

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TASK SUMMARY 171-128-3001 (cont)

REFERENCES

FM 21-6, How to Prepare and Conduct Military Training, chap 6, pp 51 thru 70 and 76.

TEC 901-071-0091-F thru TEC 901-071-0097-F, Military Instructor Training.

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CONSOLIDATED LIST OF REFERENCES

MOS 19D3

This list of references includes all material cited in Soldier's Manuals for MOS 19D3, Skill Level 3. Changes to these publications and current publication dates can be found in the DA Pam 310 series. Reference changes which substantially alter the task summaries contained in your Soldier's Manuals will be published as a part of your SQT notice.

ARMY REGULATIONS (AR)

600-200	Enlisted Personnel Management System.

DEPARTMENT OF THE ARMY PAMPHLETS (DA Pam)

623-1	Preparation of Enlisted Evaluation Reports.

FIELD MANUALS (FM)

3-12	Operational Aspects of Radiological Defense.
5-25	Explosives and Demolitions.
6-121	Field Artillery Target Acquisition.
17-95	Cavalry.
20-32	Mine/Countermine Operations at the Company Level.
21-6	How to Prepare and Conduct Military Training.
21-10	Field Hygiene and Sanitation.
21-15	Care and Use of Individual Clothing and Equipment.
21-19	Foot Marches.
21-26	Map Reading.
21-30	Military Symbols.
21-40	NBC Defense
21-75	Combat Training of the Individual Soldier and Patrolling.
22-100	Military Leadership.
30-5	Combat Intelligence.
55-30	Army Motor Transport Operations.
71-1	Tank and Mechanized Infantry Company Team.
71-2	Mechanized Infantry/Tank Task Force.

TRAINING CIRCULARS (TC)

7-24	Antiarmor Tactics and Techniques for Mechanized Infantry.
20-32-1	Hasty Protective Mining
23-24	Assault Weapon System, M47 (DRAGON).

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TRAINING EXTENSION COURSES (TEC)

901-071-0091-F	Unit Development and Training, Part 1.
935-071-1027-F	Analyze Weather and Terrain.

TECHNICAL MANUALS (TM)

9-2300-257-10	Operator's Manual: M113.
9-2320-218-10	Operator's Manual Manual: M151.
5-5420-202-10	Operator's Manual for Launcher, M60A1 Tank Chassis Transporting for Bridge, Armored-Vehicle-Launcher; Scissoring Type, Class 60, NSN 5420-00-889-2020.
9-2350-215-10	Operator's Manual for Tank, Combat, Full Tracked: 105-mm Gun, M60A1 w/e (2350-756-8497); Tank, Combat, Full Tracked: 105-mm Gun, M60 w/e (2350-678-5773).
9-2350-230-10	Operator's Manual (Crew) for Armored Reconnaissance/Airborne Assault Vehicle, Full-Tracked, 152-mm Gun/ Launcher M551 (2350-00-140-5151) (Sheridan).
9-2350-232-10	Operator's Manual for Tank, Combat, Full Tracked: 152-mm Gun/Launcher, M60A2, w/e (2350-930-3590).
9-2350-257-10	Operator's Manual: M60A1.
9-2350-258-10	Operator's Manual for Tank, Combat, Full Tracked: 105-mm Gun, M48A5.
11-6665-209-15	Radiac Set AN/PDR-27J, L, and Q.
11-6665-230-15	Radiac Set AN/PDR-27R.
38-750	The Army Maintenance Management System (TAMMS).

GRAPHIC TRAINING AIDS (GTA)

5-10-28	Demolition Card.

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QUESTIONNAIRE

This is your *Soldier's Manual,* and we need your help to make it better. Your answers to these questions will tell us how we can improve your manual.

Does the introduction help you understand the MOS organization and how to get promoted?

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Do you understand how to use your *Soldier's Manual*?

Do you understand the tasks expected of you?

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